

STR-W777

SERVICE MANUAL

*AEP Model
UK Model
E Model
Australian Model*



STR-W777 is the tuner and amplifier section in MHC-W777AV.

SPECIFICATIONS

Amplifier section

(Saudi Arabia, Singapore, Malaysia, Thai, Australian)

The following measured at AC 230V 50/60 Hz

DIN power output (Rated) (FRONT)

95 + 95W (6 Ω at 1kHz DIN)

Continuous RMS power output (Reference)

FRONT SPEAKER: 110 + 110W

(6 Ω at 1kHz, 10% THD)

CENTER SPEAKER: 55W

(8 Ω at 1kHz, 10% THD)

REAR SPEAKER: 35 + 35W

(8 Ω at 1kHz, 10% THD)

The following measured at AC 120, 220, 240V 50/60Hz

DIN power output (Rated) (FRONT)

100 + 100W (6 Ω at 1kHz DIN)

Continuous RMS power output (Reference)

FRONT SPEAKER: 120 + 120 W

(6 Ω at 1kHz, 10% THD)

CENTER SPEAKER: 60W

(8 Ω at 1kHz, 10% THD)

REAR SPEAKER: 40 + 40W

(8 Ω at 1kHz 10% THD)

Peak music power output 2400W

(AEP, UK, East European, CIS)

DIN power output (Rated) (FRONT)

80 + 80W (6 Ω at 1kHz DIN)

Continuous RMS power output (Reference)

FRONT SPEAKER: 100 + 100W

(6 Ω at 1kHz, 10% THD)

CENTER SPEAKER: 60W

(8 Ω at 1kHz, 10% THD)

REAR SPEAKER: 35 + 35W

(8 Ω at 1kHz, 10% THD)

Music power output (Reference)

FRONT SPEAKER: 190 + 190 W

(6 Ω at 1kHz, 10% THD)

CENTER SPEAKER: 90W

(8 Ω at 1kHz, 10% THD)

REAR SPEAKER: 55 + 55W

(8 Ω at 1kHz, 10% THD)

Inputs

MD/VIDEO 1 IN (phone jacks): voltage

450/250mV, impedance 47k Ω

AV INPUT AUDIO (phone jacks): voltage

250mV, impedance 47k Ω

MIX MIC (phone jack): sensitivity 1mV,

impedance 10k Ω

— Continued on next page —

FM STEREO/FM-AM RECEIVER



SONY®

Output	MD/VIDEO 1 OUT (phono jacks): voltage 450/250mV, impedance 1kΩ PHONES (stereo phone jack): accepts headphones of 8Ω or more. FRONT SPEAKER: accepts impedance of 6 to 16Ω CENTER SPEAKER: accepts impedance of 8 to 16Ω REAR SPEAKER: accepts impedance of 8 to 16Ω SUPER WOOFER: Voltage 1V, impedance 1kΩ
--------	--

Video section

Inputs	AV INPUT VIDEO (phone jack): 1Vp-p, 75Ω
Outputs	MONITOR OUT (phone jack): 1Vp-p, 75Ω

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
3 band type model	87.5 – 108.0MHz (50kHz step)
4 band type model	65.0 – 74.0MHz (10kHz step) 87.5 – 108.0MHz (50kHz step)
Aerial	FM lead aerial
Aerial terminals	75Ω unbalanced
Intermediate frequency	10.7MHz

UKV tuner section (4 band type model only)

Tuning range	65.0 – 74.0MHz (10kHz step) Polar Stereo
--------------	---

AM tuner section

Tuning range	
Australian model:	531 – 1,602kHz (with the AM tuning interval set at 9kHz) 530 – 1,710kHz (with the AM tuning interval set at 10kHz)
Other models:	MW: 531 – 1,602kHz (with the MW tuning interval set at 9kHz) 530 – 1,710kHz (with the MW tuning interval set at 10kHz) SW: 5.95 – 17.90MHz (with the SW tuning interval set at 5kHz) LW: 153 – 279kHz (with the interval set at 3kHz)
Intermediate frequency	450kHz
Antenna	AM loop antenna External antenna terminal

General

Power requirements	
Australian models:	240V AC, 50/60Hz
AEP, UK, East European, CIS models:	230V AC, 50/60Hz
Other models:	120V or 220V or 230 – 240, 50/60Hz Adjustable with voltage selector
Power consumption	270W (AEP, UK, East European, CIS models) 300W (Other models)
Dimensions (w/h/d)	Approx. 288 × 205 × 375mm
Mass	Approx. 8.8kg
Supplied accessories:	AM loop antenna (1) Remote RM-SR77 (1) Size AA (R6) batteries (2) FM lead antenna (1) Speaker cords (5) Front speaker pads (8)

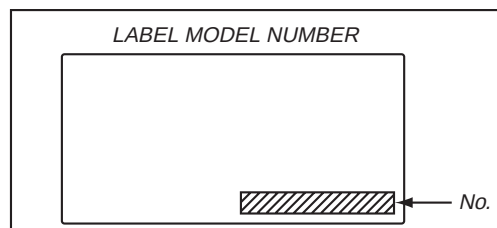
Design and specifications are subject to change without notice.

TABLE OF CONTENTS

1. GENERAL	4
2. DISASSEMBLY	
• Sliding Panel Assembly	5
3. SERVICE MODE	6
4. ELECTRICAL ADJUSTMENT	11
5. DIAGRAMS	
5-1. Circuit Boards Location	12
5-2. Block Diagrams	
• Tuner Section (AEP, UK model)	13
• Tuner Section (East European, CIS model)	15
• Main Section	17
• Power Section	19
5-3. Schematic Diagram	
–Tuner (AEP, UK model) Section –	23
5-4. Printed Wiring Board	
–Tuner (AEP, UK model) Section –	25
5-5. Printed Wiring Board	
–Tuner (East European, CIS model) Section –	26
5-6. Schematic Diagram	
–Tuner (East European, CIS model) Section –	27
5-7. Printed Wiring Board – Main Section –	29
5-8. Schematic Diagram – Main (1/2) Section –	31
5-9. Schematic Diagram – Main (2/2) Section –	33
5-10. Schematic Diagram – AV/Mic Section –	35
5-11. Printed Wiring Board – AV/Mic Section –	36
5-12. Schematic Diagram – Power Amp Section –	37
5-13. Printed Wiring Board – Power Amp Section –	39
5-14. Schematic Diagram – Display Section –	41
5-15. Printed Wiring Board – Display Section –	43
5-16. Schematic Diagram – Sliding Panel Section –	45
5-17. Printed Wiring Board – Sliding Panel Section –	47
5-18. Schematic Diagram – Surround Section –	49
5-19. Printed Wiring Board – Surround Section –	51
5-20. Printed Wiring Board – Trans Section –	53
5-21. Schematic Diagram – Trans Section –	55
5-22. IC Block Diagrams	56
5-23. IC Pin Function	60
6. EXPLODED VIEWS	
6-1. Case and Sliding Panel Section	63
6-2. Front Panel Section	64
6-3. Slide Mechanism Section	65
6-4. Circuit Boards and Back Panel Section	66
7. ELECTRICAL PARTS LIST	67

MODEL IDENTIFICATION

— BACK PANEL —



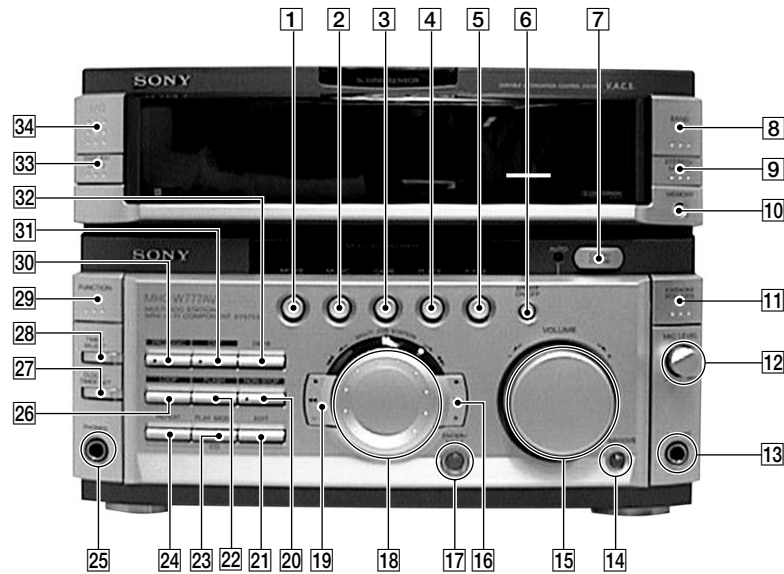
MODEL	PART No.
Saudi Arabia, Singapore, Malaysia	4-900-848-2□
Thai, Australian	4-900-848-3□
AEP, UK, East European, CIS	4-900-848-4□

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK $\triangle$ OR DOTTED LINE WITH MARK $\triangle$ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

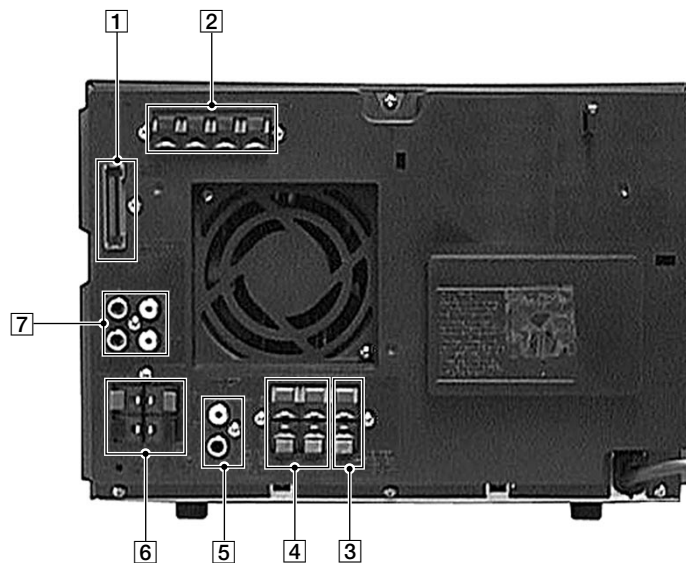
SECTION 1 GENERAL

Front Panel



- | | | |
|---------------------------|---------------------------|---------------------------|
| 1 MOVIE button | 13 MIX MIC jack | 25 PHONES jack |
| 2 MUSIC button | 14 GROOVE button | 26 LOOP button |
| 3 GAME button | 15 VOLUME dial | 27 CLOCK/TIMER SET button |
| 4 PLACE button | 16 ►► + button | 28 TIMER SELECT button |
| 5 P FILE button | 17 ENTER/NEXT button | 29 FUNCTION button |
| 6 EFFECT ON/OFF button | 18 MULTI JOG STATION dial | 30 PROLOGIC button |
| 7 OPEN/CLOSE button | 19 ◀◀ - button | 31 DSP button |
| 8 TUNER BAND button | 20 NON-STOP button | 32 DBFB button |
| 9 STEREO/MONO button | 21 EDIT button | 33 DISPLAY/DEMO button |
| 10 MEMORY button | 22 FLASH button | 34 I/⏻ (POWER) button |
| 11 KARAOKE PON/MIX button | 23 PLAY MODE button | |
| 12 MIC LEVEL dial | 24 REPEAT button | |

Rear Panel

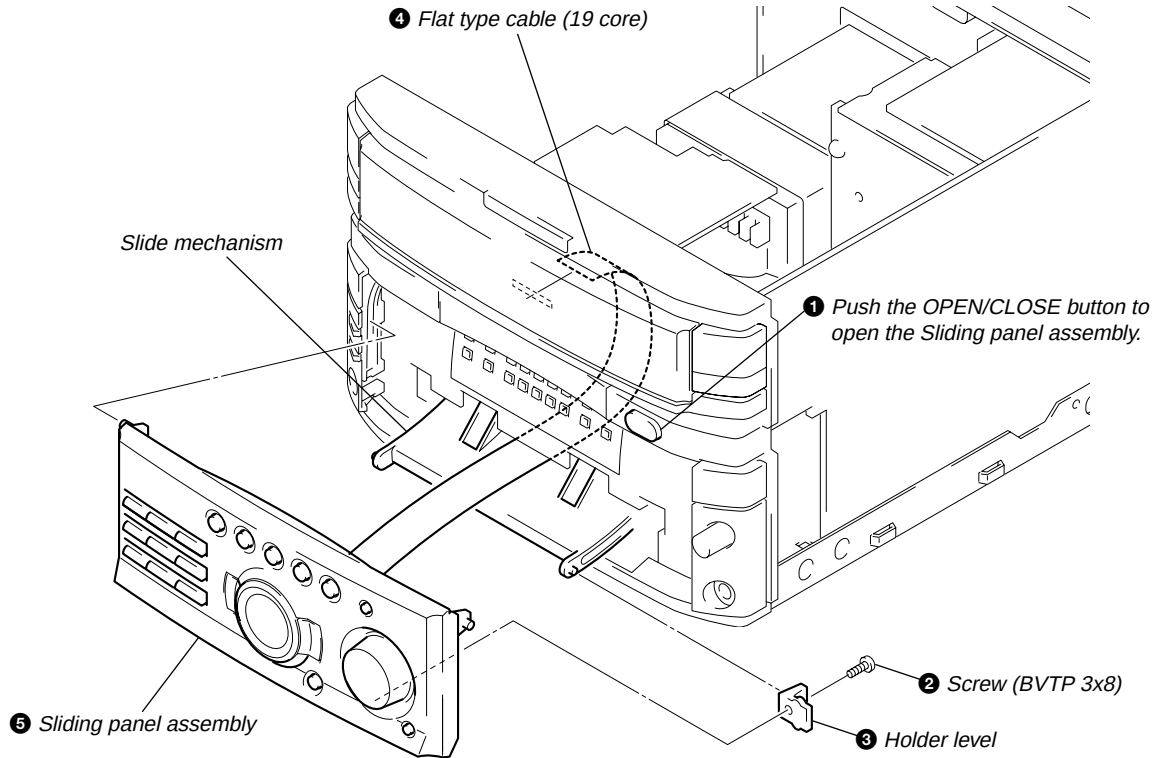


- | |
|---------------------------|
| 1 SYSTEM CONTROL jack |
| 2 ANTENNA terminal |
| 3 CENTER SPEAKER terminal |
| 4 REAR SPEAKER terminal |
| 5 MONITOR OUT jack |
| 6 FRONT SPEAKER terminal |
| 7 MD/VIDEO 1 jack |

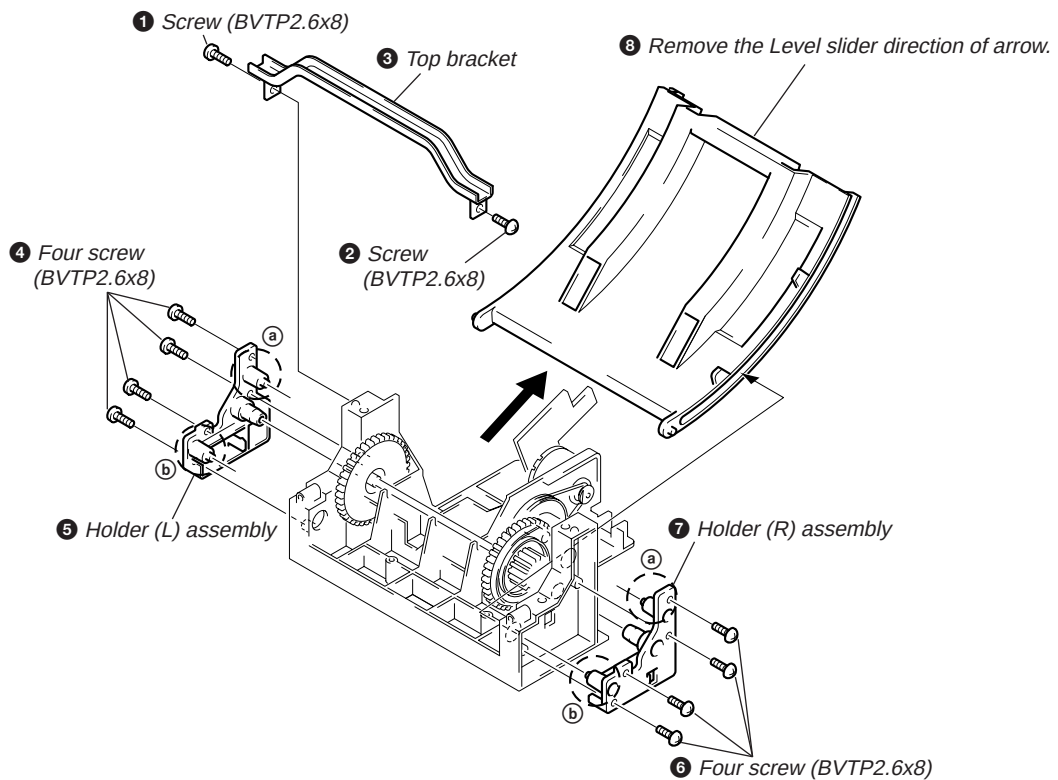
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

2-1. SLIDING PANEL ASSEMBLY



• NOTE FOR INSTALLATION (LEVEL SLIDER)



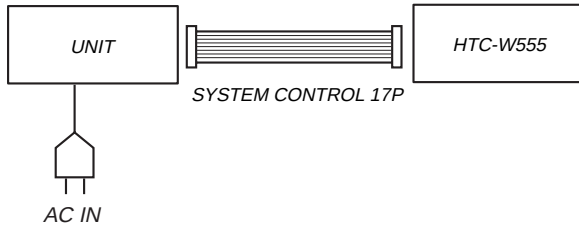
NOTE :

Attach in the reverse order, but make sure the rollers (a, b) of the holder (L) assembly and holder (R) assembly fit into the grooves of the level slider.

SECTION 3 SERVICE MODE

Connections and Operations When Used Alone

Normally, use the unit connected to the HTC-W555 as follows.
Basically, when servicing the unit, connect the unit as follows.



Even when not connected to the HTC-W555, the unit can operate alone as it mounts a power supply (some functions will however not be available).

MC Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

- Press three buttons **[EDIT]**, **[ENTER/NEXT]**, and **[DISPLAY/DEMO]** simultaneously.
- The fluorescent indicator tube becomes blink instantaneously, and the set is reset.

CD Delivery Mode (This mode can be used only when the HTC-W555 is connected.)

- This mode moves the pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

- Press **[I/⏻]** button to turn the set ON.
- Press **[LOOP]** button and **[I/⏻]** button simultaneously.
- A message “LOCK” is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

MC Hot Reset

- This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

- Press three buttons **[REPEAT]**, **[ENTER/NEXT]**, and **[DISPLAY/DEMO]** simultaneously.
- The fluorescent indicator tube becomes blink instantaneously, and the set is reset.

Sled Servo Mode (This mode can be used only when the HTC-W555 is connected.)

- This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pick-up.

Procedure:

- Select the function “CD”.
- Press three buttons **[FLASH]**, **[ENTER/NEXT]**, and **[KARAOKE PON/MIX]** simultaneously.
- The Sled Servo mode is selected, if “CD” is blinking on the fluorescent indicator tube.
- With the CD in stop status, press **[▶▶+]** button move the pick-up to outside track, or **[−◀◀]** button to inside track.
- To exit from this mode, perform as follows:
 - Move the pick-up to the most inside track.
 - Press three buttons in the same manner as step 2.

Note:

- Always move the pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

Change-over of FUNCTION Name

- The FUNCTION name of external input terminal can be changed over to VIDEO 1 or MD. With the FUNCTION selected to “MD”, about 5dB mute is applied to the input gain.

Procedure:

- Press **[I/⏻]** button to turn the set OFF.
- Press **[I/⏻]** button together with **[FUNCTION]** button, and the power is turned on, the display of fluorescent indicator tube changes to “MD” or “VIDEO 1” instantaneously, and thus the FUNCTION is changed over.

Change-over of AM Tuner Step between 9kHz and 10kHz

- A step of AM channels can be changed over between 9kHz and 10kHz.

Procedure:

- Press **[I/⏻]** button to turn the set ON.
- Select the function “TUNER”, and press **[TUNER/BAND]** button to select the BAND “MW”.
- Press **[I/⏻]** button to turn the set OFF.
- Press **[ENTER/NEXT]** and **[I/⏻]** buttons simultaneously, and the display of fluorescent indicator tube changes to “MW step 10” or “MW step 9”, and thus the channel step is changed over.

LED and Fluorescent Indicator Tube All Lit, Key Check Mode (Do not connect the HTC-W555.)

Procedure:

1. Press **[I/O]** button to turn the set ON.
2. Press the **[OPEN/CLOSE]** button to open the sliding panel.
3. Press three buttons **[DELAY]**, **[ENTER/NEXT]**, and **[DISPLAY/DEMO]** simultaneously.
4. LEDs and fluorescent indicator tube are all turned on. Each time the **[MOVIE]** button is pressed, the fluorescent indicator tube lights up as follows:
lights up completely → lights up partially 1 → lights up partially 2 → lights up completely.
5. Press **[GAME]** button, and the key check mode is activated.
6. In the key check mode, the fluorescent indicator tube displays “K @@ V0 J0”. Each time a button is pressed, “K” value decreases. However, once a button is pressed, it is no longer taken into account. (@@ means the total of buttons)
“J” Value increases like 1, 2, 3 ... if rotating **[JOG]** knob in “+” direction, or it decreases like 0, 9, 8 ... if rotating in “-” direction.
“V” Value increases like 1, 2, 3 ... if rotating **[VOLUME]** knob in “+” direction, or it decreases like 0, 9, 8 ... if rotating in “-” direction.
7. Pressing all buttons lights up the fluorescent indicator tube completely.
8. To exit from this mode, press three buttons **[EDIT]**, **[ENTER/NEXT]** and **[DISPLAY/DEMO]** simultaneously. (COLD RESET)
9. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

CD, TAPE Deck Aging Mode (This mode can be used only when the HTC-W555 is connected.)

This mode can be used for checking the operations of the CD player and tape deck.

- When problems occur;
Aging stops, and the stopped state is displayed on the fluorescent indicator tube.
- When no problems;
Aging continues.

Preparations:

- Set the CD on the DISC1 tray.
- Insert a commercially available tape for recording (tapes which contents can be erased, etc.) in decks A and B.

Setting the aging mode:

Press the **[PLAY MODE]** button, **[ENTER/NEXT]** button, and **[STEREO/MONO]** button together.

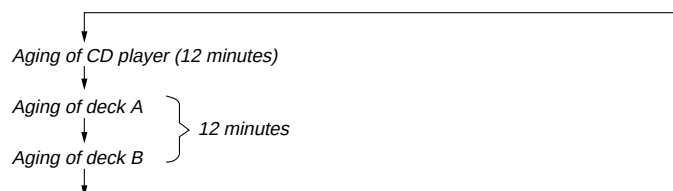
When the aging mode is set, the CD roulette mark blinks. To exit the mode, press the **[I/O]** button and turn OFF the power.

Sequence:

The aging mode is executed in the following sequence.

If the function is set to “CD” when the aging mode is set, aging is performed starting from the CD player. When set to “TAPE A” or “TAPE B”, aging is started from deck A.

If the function is set to others, aging will not be started until the function is switched to CD or TAPE.



Display of status:

- The aging status is displayed on the fluorescent indicator tube.
- Normally, the CD player displays the remaining aging time. But if operations ended abnormally, it displays the cause.
- During the aging of the tape deck, the operations performed will be displayed. If operations ended abnormally, this will be displayed at the fluorescent display tube.

CD Player

- During normal operations:
Display of fluorescent indicator tube

**1-@@

**: Displays “CD” and the remaining aging time (minutes) alternately. The remaining aging time is counted down from 12.

@@: Track number being accessed.

• **When operations end abnormally:**

Display of fluorescent display tube

Display	Main Cause
NO DISC ERR	DISC 1 is NO DISC from the beginning
FOCUS1 ERR	Focus is not imposed properly
FOCUS2 ERR	The focus deviated several times after the disc rotated normally
GFS ERR	GFS ERROR
FBIAS ERR	Error during focus bias adjustment
SENSOR ERR	DISC 1 was found to be NO DISC by the disc sensor
TABLE ERR	The table did not rotate normally
TRAY ERR	The tray containing the BD did not operate normally

Tape Deck

Display of Operations	Operation	Timing of Ending
TAPE A AG-1	TAPE A REW	Shutoff
TAPE A AG-2	TAPE A FWD	2 minute playback
TAPE A AG-3	TAPE A FF	20 seconds or shutoff
TAPE A AG-4	TAPE A REV	2 minutes playback
TAPE A AG-5	TAPE A REW	Shutoff
TAPE B AG-1	TAPE B REW	Shutoff
TAPE B AG-2	TAPE B FWD	2 minute playback
TAPE B AG-3	TAPE B FF	20 seconds or shutoff
TAPE B AG-4	TAPE B REV	2 minute playback
TAPE B AG-5	TAPE B REW	Shutoff

Operations during aging

- Operations are performed in the following sequence during aging.

<CD player>

1. The CD tray rotates and disc 1 is selected.
2. Chucking is performed.
3. TOC is read.
4. Track 1 played back for 2 seconds.
5. The last track is played back for 2 seconds.
6. 1 to 5 is repeated.
7. After 12 minutes of aging, aging is switched to the tape deck.

<Tape Deck>

1. The tape in deck A is rewound to the head.
2. The FWD side is played back for 2 minutes.
3. The tape is fast forwarded (FF) for 20 seconds. The following procedure is performed when the tape end is reached before the 20 seconds.
4. The REV side is played back for 2 minutes.
5. The tape is rewound to the head (REW).
6. The tape in deck B is rewound to the head.
7. The FWD side is played back for 2 minutes.
8. The tape is fast forwarded (FF) for 20 seconds. The following procedure is performed when the tape end is reached before the 20 seconds.
9. The REV side is played back for 2 minutes.
10. The tape is rewound to the head (REW).
11. Aging is switched to the CD player.

PANEL Aging Mode

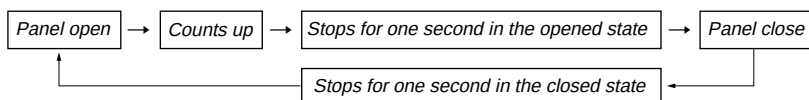
This mode is used for opening and closing the sliding panel continuously.

Setting the aging mode :

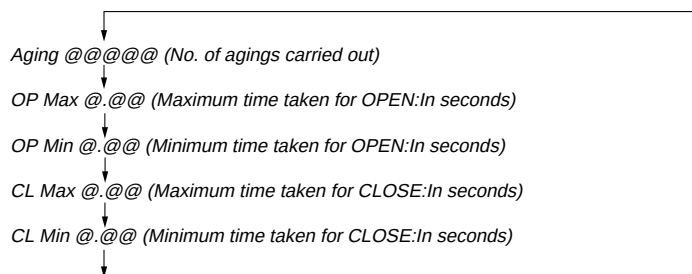
With the set at standby condition, press **FLASH** button, **ENTER/NEXT** button and **STEREO/MONO** button together. The aging will start and sliding panel will follow aging sequence as described below.

- When problems occur ;
Aging stops and “AGING ERROR” is displayed on the fluorescent indicator tube.
- When no problems;
Aging is carried out repeatedly. After 65000 times, “AGING STOP” is displayed and aging stops.

Aging Sequence



Each time the **DISPLAY/DEMO** button is pressed, the display switches as follows.



SECTION 4 ELECTRICAL ADJUSTMENT

TUNER SECTION

0dB=1μV

Note 1: As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

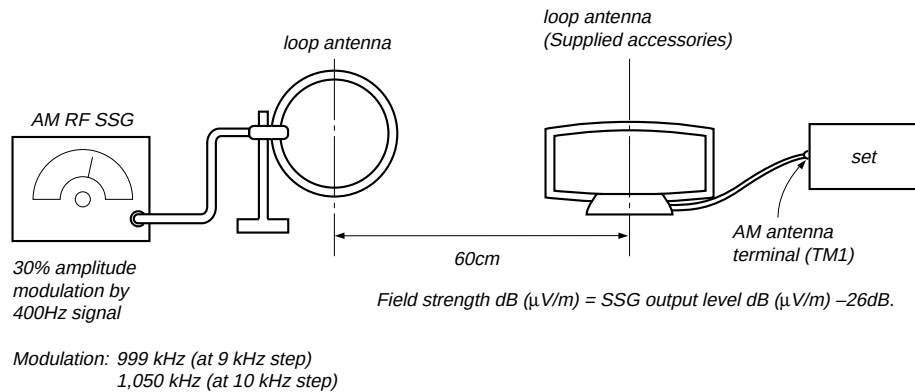
Note 2: No adjustment is needed for a tuner pack except for AEP, UK, East European, CIS models.

AM Tuned Level Adjustment (AEP, UK, East European, CIS model)

Note: FM Tuned Level Adjustment should be performed after this AM Tuned Level Adjustment.

Setting:

Band: MW



Procedure:

1. Set the output of SSG so that the input level of the set becomes 55 dB.
2. Tune the set to 999 kHz or 1,050 kHz.
3. Adjust RV41 to the point (moment) when the TUNED indicator will change from going off to going on.

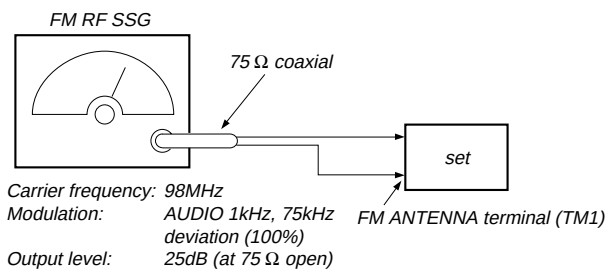
Adjustment Location: TCB board

FM Tuned Level Adjustment (AEP, UK, East European, CIS model)

Note: This adjustment should be performed after the AM Tuned Level Adjustment.

Setting:

Band: FM



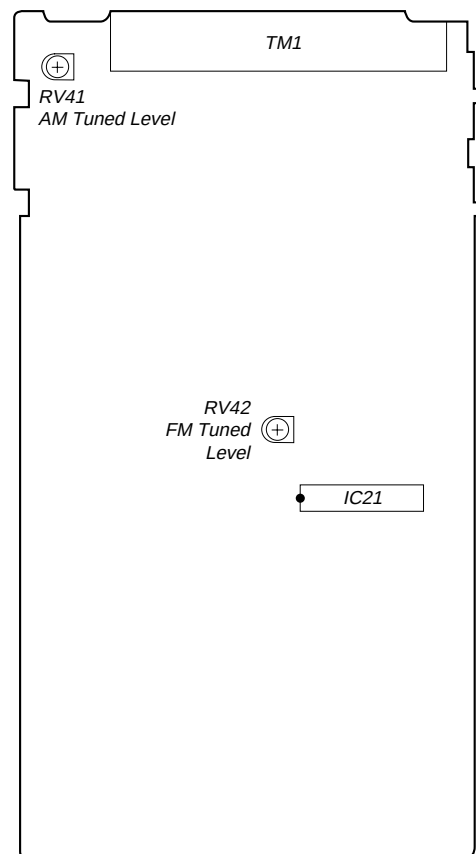
Procedure:

1. Supply a 25 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV42 to the point (moment) when the TUNED indicator will change from going off to going on.

Adjustment Location: TCB board

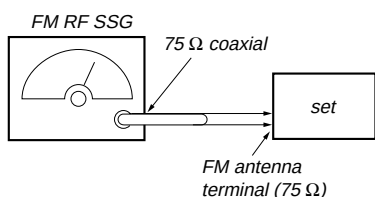
Adjustment Location

[TCB BOARD] (Component Side)



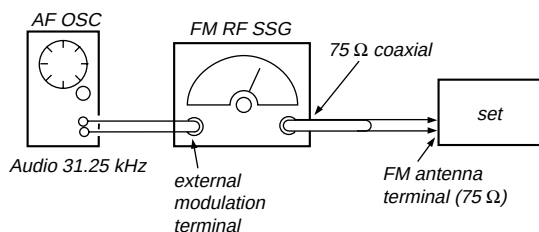
FM Polar Adjustment (East European, CIS model)

Connection 1 :



Carrier frequency: 69 MHz
Output level: 1 mV (60 dBμ) (at 75 Ω open)
Modulation: AUDIO 1 kHz, 10 kHz deviation

Connection 2 :



Carrier frequency: 69 MHz
Output level: 1 mV (60 dBμ) (at 75 Ω open)
Modulation: AUDIO 31.25 kHz, 10 kHz deviation (EXTERNAL MODULATION)

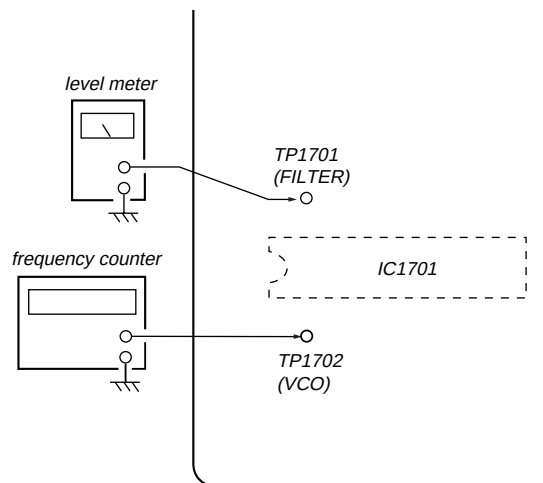
Procedure :

1. Set the modulation of FM RF SSG to AUDIO 1 kHz, 10 kHz deviation according to "Connection 1".
2. Tune the set to 69 MHz.
3. Adjust the RV1702 so that the reading of frequency counter connected to TP1702 (VCO) becomes within 31.25 kHz $\pm$ 0.05 kHz. (VCO adjustment)
4. Then record the reading of the level meter connected to TP1701.
5. Set the modulation of FM RF SSG to AUDIO 31.25 kHz, 10 kHz deviation according to "Connection 2".
6. Tune the set to 69 MHz.
7. Set the CT1701 to be mechanical center.
8. Adjust the L1701 so that the reading of the level meter connected to TP1701 (FILTER) becomes maximum. Then adjust the CT1701 so that the reading of the level meter connected to TP1701 (FILTER) becomes maximum. (SUB CARRIER PEAK Adjustment)
9. Adjust the RV1701 so that the level at the moment becomes 14 dB higher value than the level recorded in step 4. (SUB CARRIER LEVEL Adjustment)

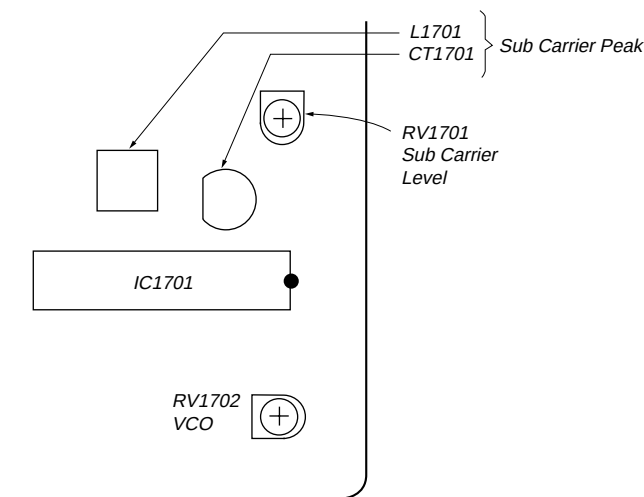
Adjustment Location: TCB board

Adjustment Location:

[TCB BOARD] (Conductor Side)

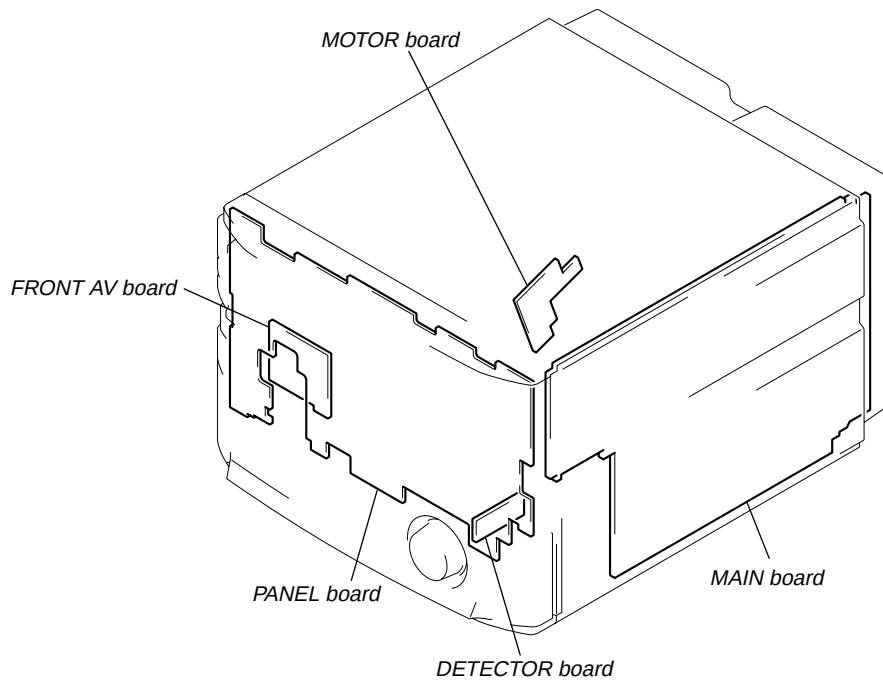
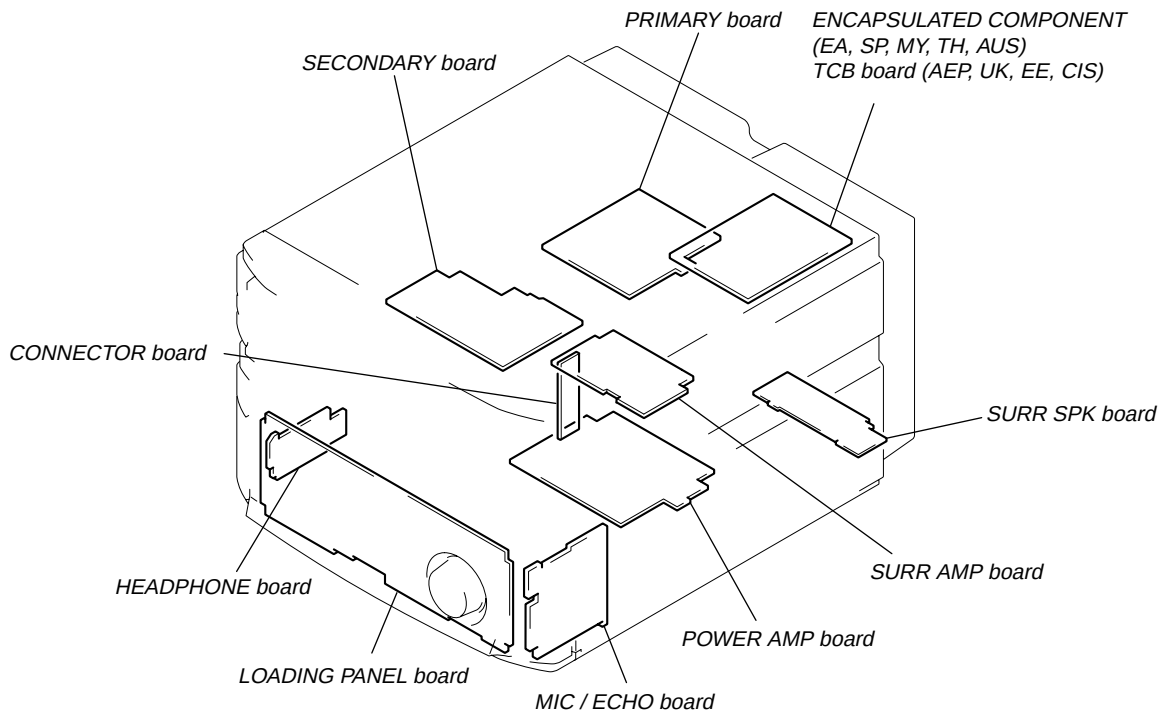


[TCB BOARD] (Component Side)



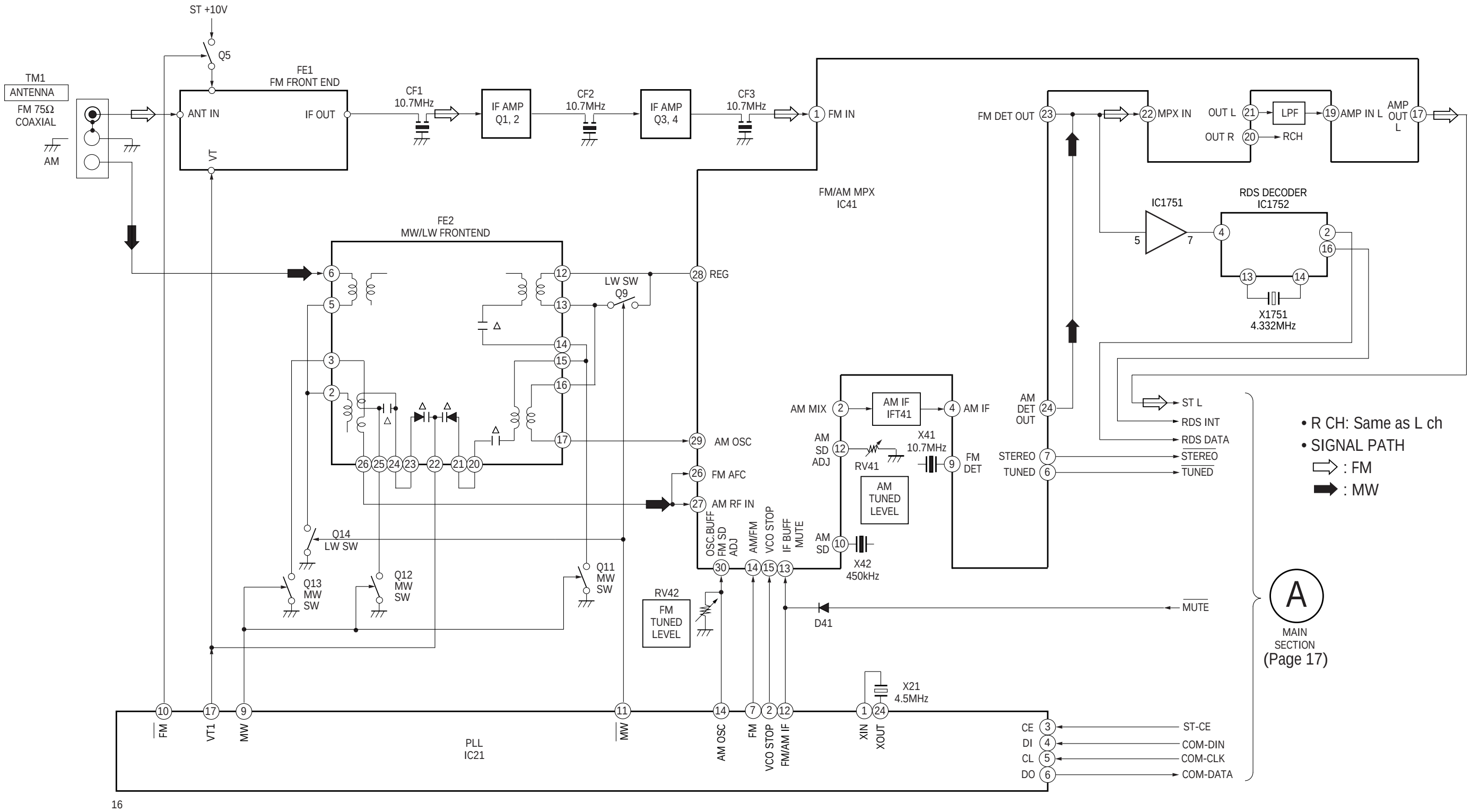
SECTION 5 DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



- Abbreviation
 - EE : East European
 - EA : Saudi Arabia
 - SP : Singapore
 - MY : Malaysia
 - AUS : Australian
 - TH : Thai

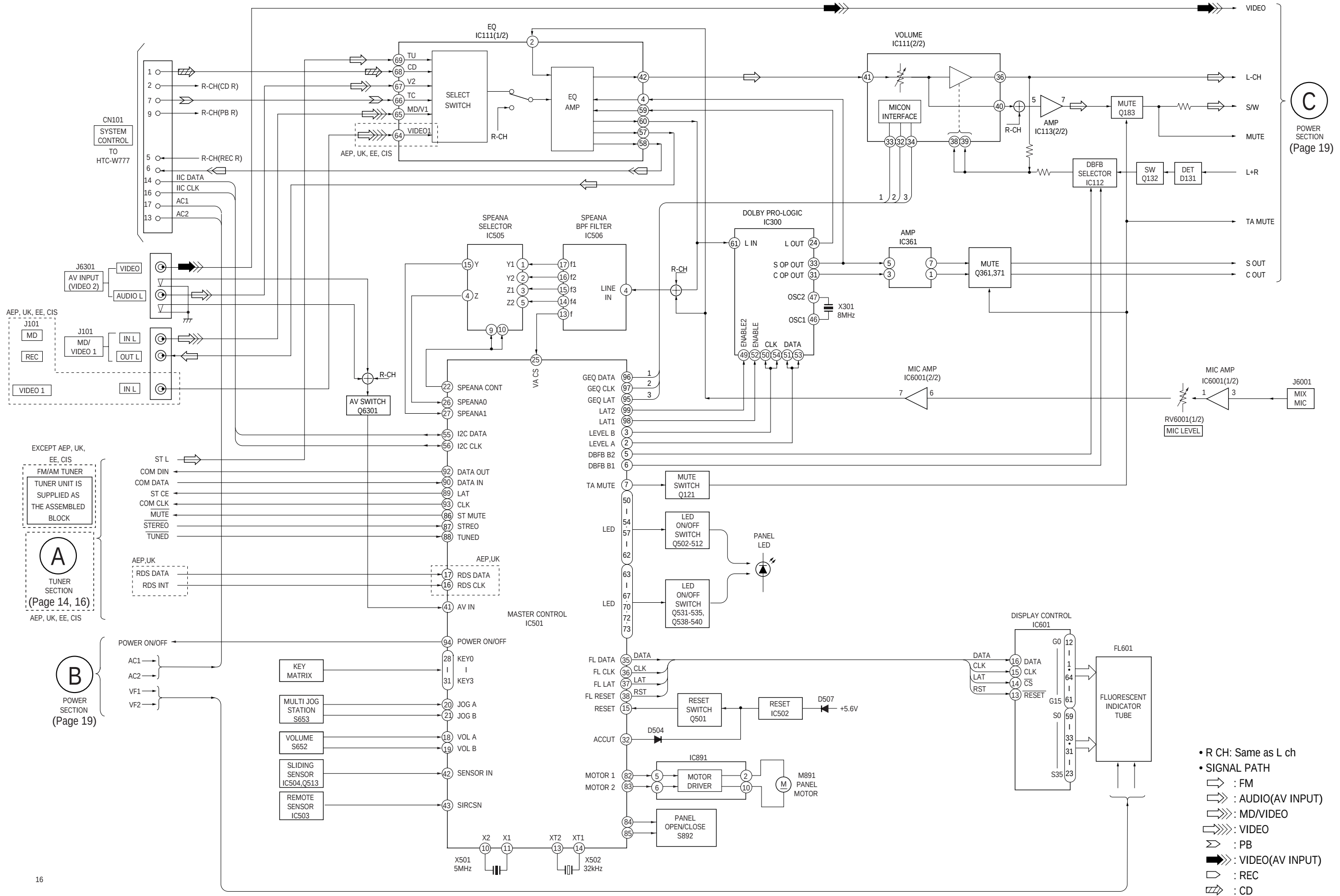
5-2. BLOCK DIAGRAM – TUNER SECTION – (AEP, UK model)



– TUNER SECTION – (East European, CIS model)

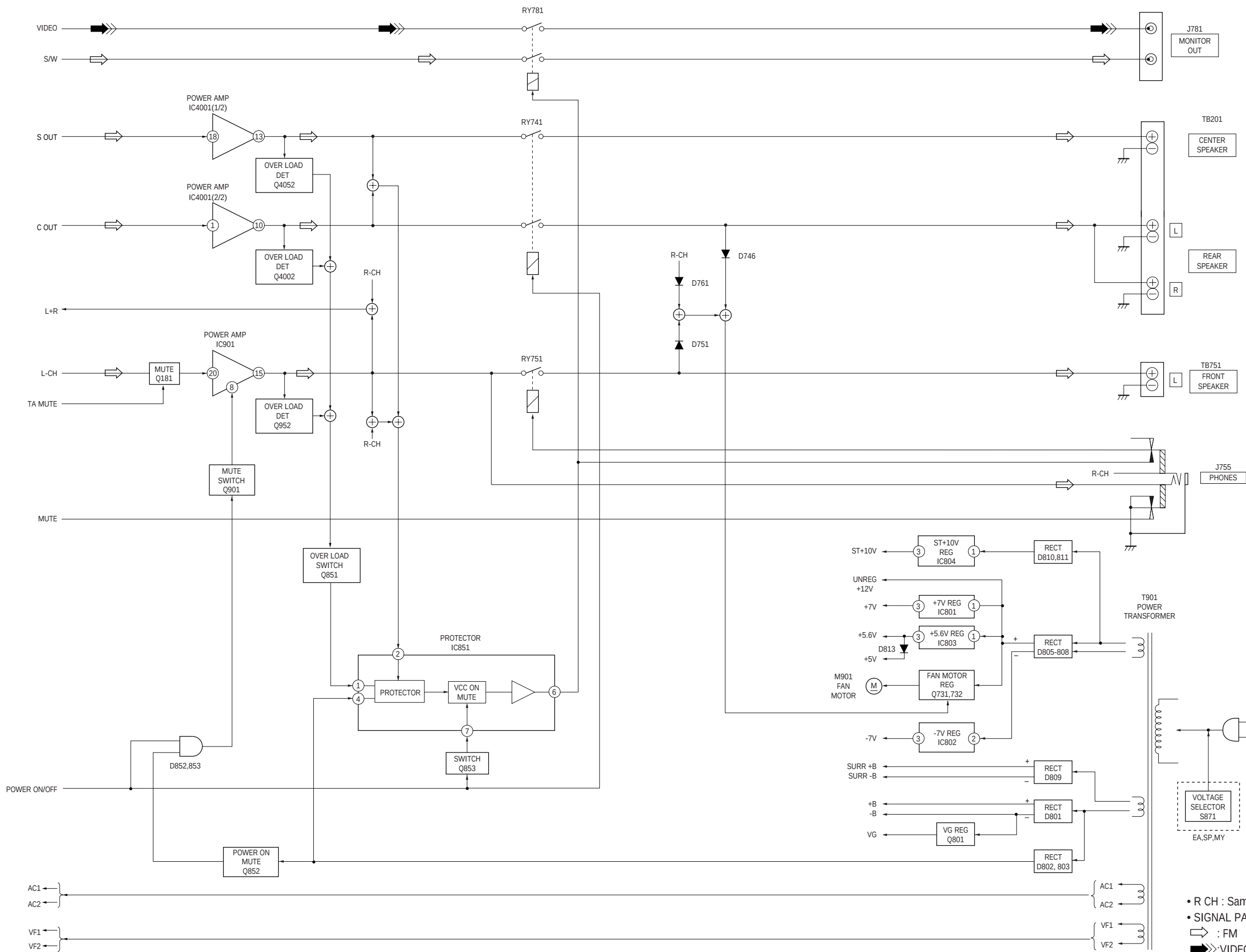


- MAIN SECTION -



- POWER SECTION -

C
MAIN
SECTION
(Page 17)



- R CH : Same as L ch
- SIGNAL PATH
- ◻ : FM
- ◼◼◼:VIDEO (AV INPUT)
- Abbreviation
- EA : Saudi Arabia model.
- SP : Singapore model.
- MY : Malaysia model.

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4} \text{ W}$ or less unless otherwise specified.
- $\triangle$: internal component.
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation.

Note: The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
 Replace only with part number specified.

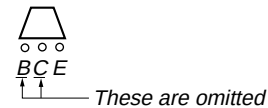
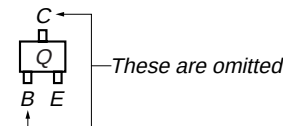
-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 -  : FM
 -  : AM
 -  : AUDIO (AV INPUT)
 -  : MD/VIDEO
 -  : VIDEO (AV INPUT)
 -  : PB (DECK A)
 -  : REC (DECK B)
 -  : CD
- Abbreviation
 - EE : East European model.
 - EA : Saudi Arabia model.
 - SP : Singapore model.
 - MY : Malaysia model.
 - AUS : Australian model.
 - TH : Thai model.

For printed wiring boards.

Note:

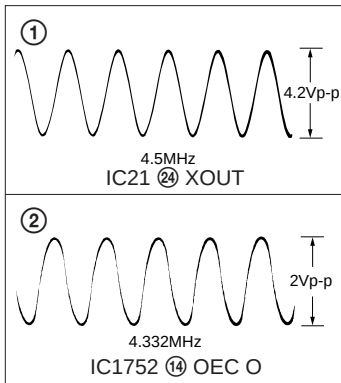
-  : parts extracted from the component side.
-  : parts extracted from the conductor side.
-  : parts mounted on the conductor side.
-  : Through hole.
- $\triangle$: internal component.
-  : Pattern from the side which enables seeing.

• Indication of transistor

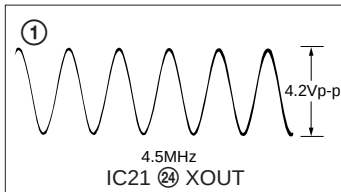


Waveforms

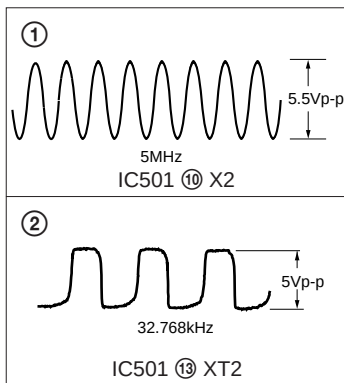
- TUNER SECTION - (AEP, UK model)

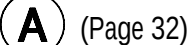


- Tuner Section - (East European, CIS model)



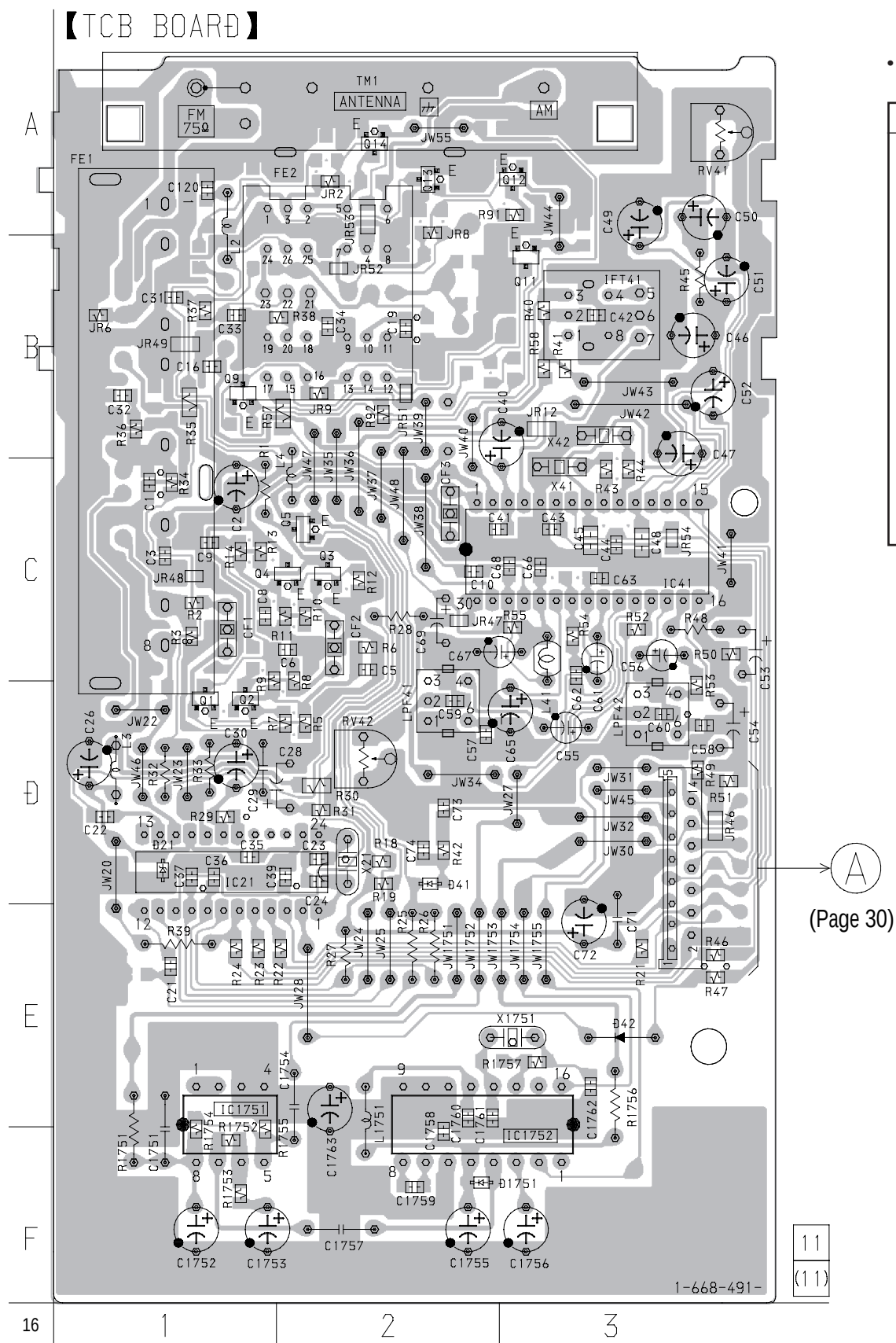
- DISPLAY Section -





5-4. Printed Wiring Board – Tuner Section – (AEP, UK model)

• Refer to page 12 for Circuit Boards Location.

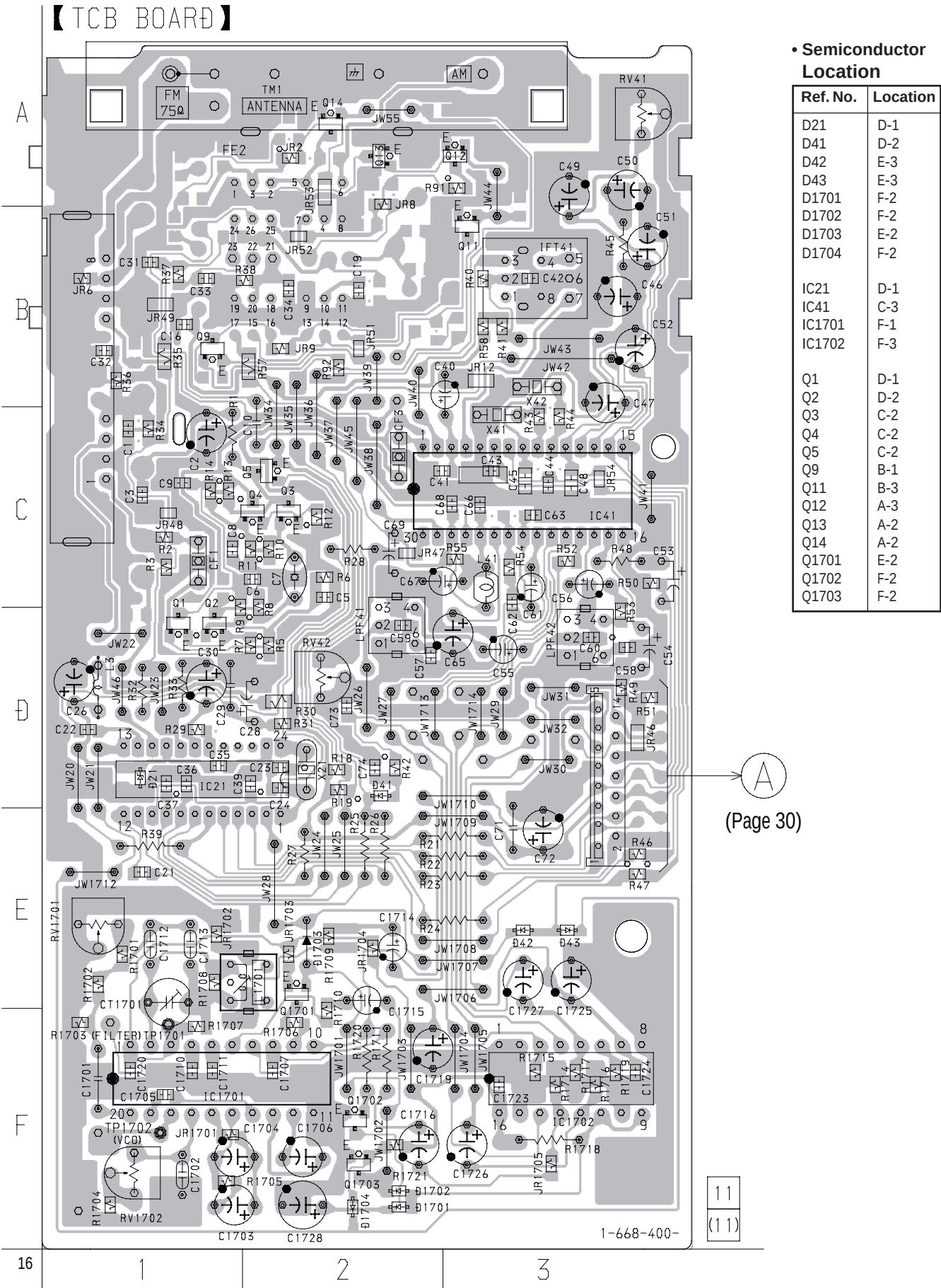


• Semiconductor Location

Ref. No.	Location
D21	D-1
D41	D-2
D42	E-3
D1751	F-2
IC21	D-1
IC41	C-3
IC1751	E-1
IC1752	F-3
Q1	D-1
Q2	D-1
Q3	C-2
Q4	C-2
Q5	C-2
Q9	B-1
Q11	B-3
Q12	A-3
Q13	A-2
Q14	A-2

5-5. Printed Wiring Board – Tuner Section – (East European, CIS model)

• Refer to page 12 for IC Block Diagrams.



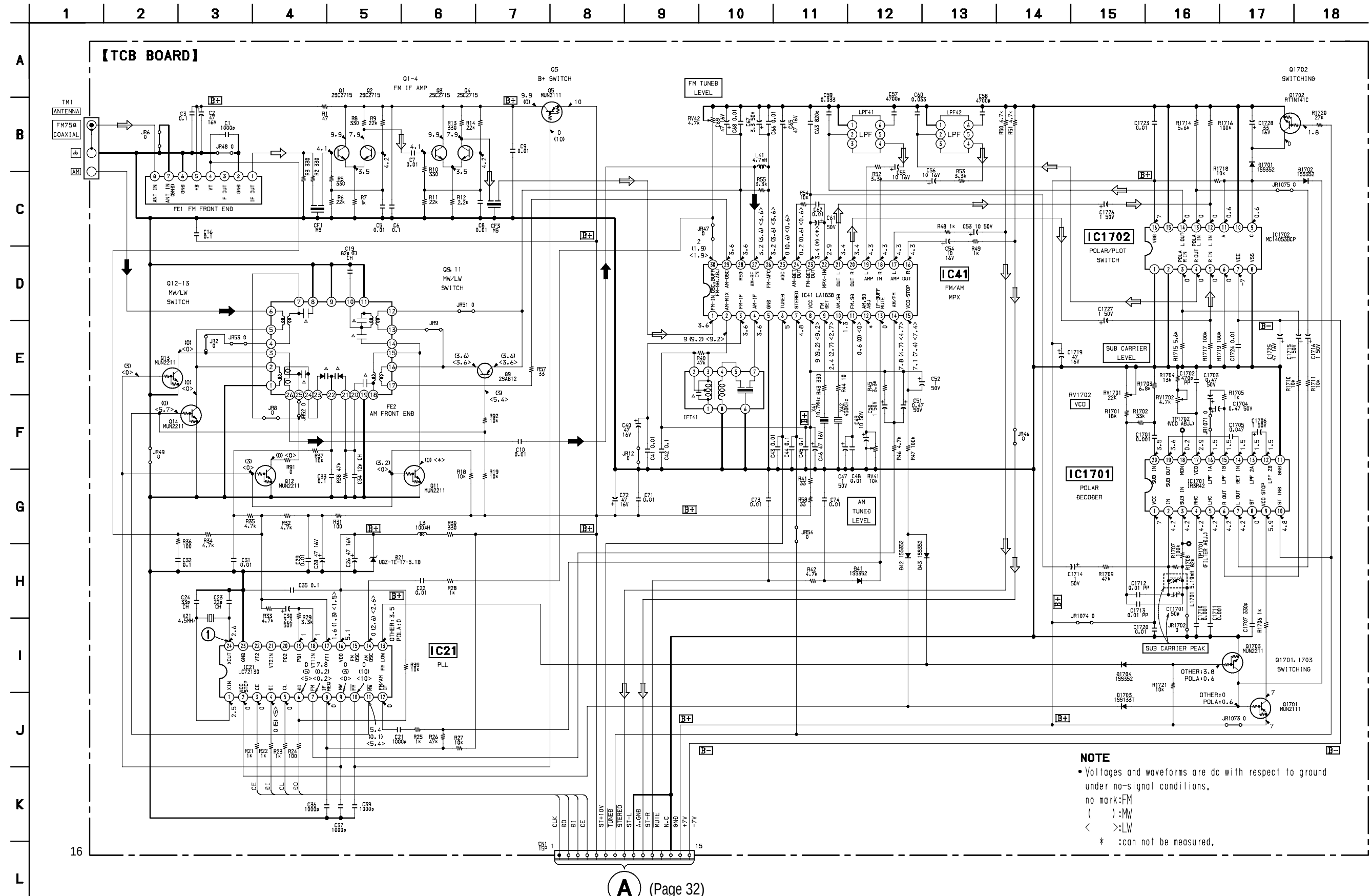
• Semiconductor Location

Ref. No.	Location
D21	D-1
D41	D-2
D42	E-3
D43	E-3
D1701	F-2
D1702	F-2
D1703	E-2
D1704	F-2
IC21	D-1
IC41	C-3
IC1701	F-1
IC1702	F-3
Q1	D-1
Q2	D-2
Q3	C-2
Q4	C-2
Q5	C-2
Q9	B-1
Q11	B-3
Q12	A-3
Q13	A-2
Q14	A-2
Q1701	E-2
Q1702	F-2
Q1703	F-2

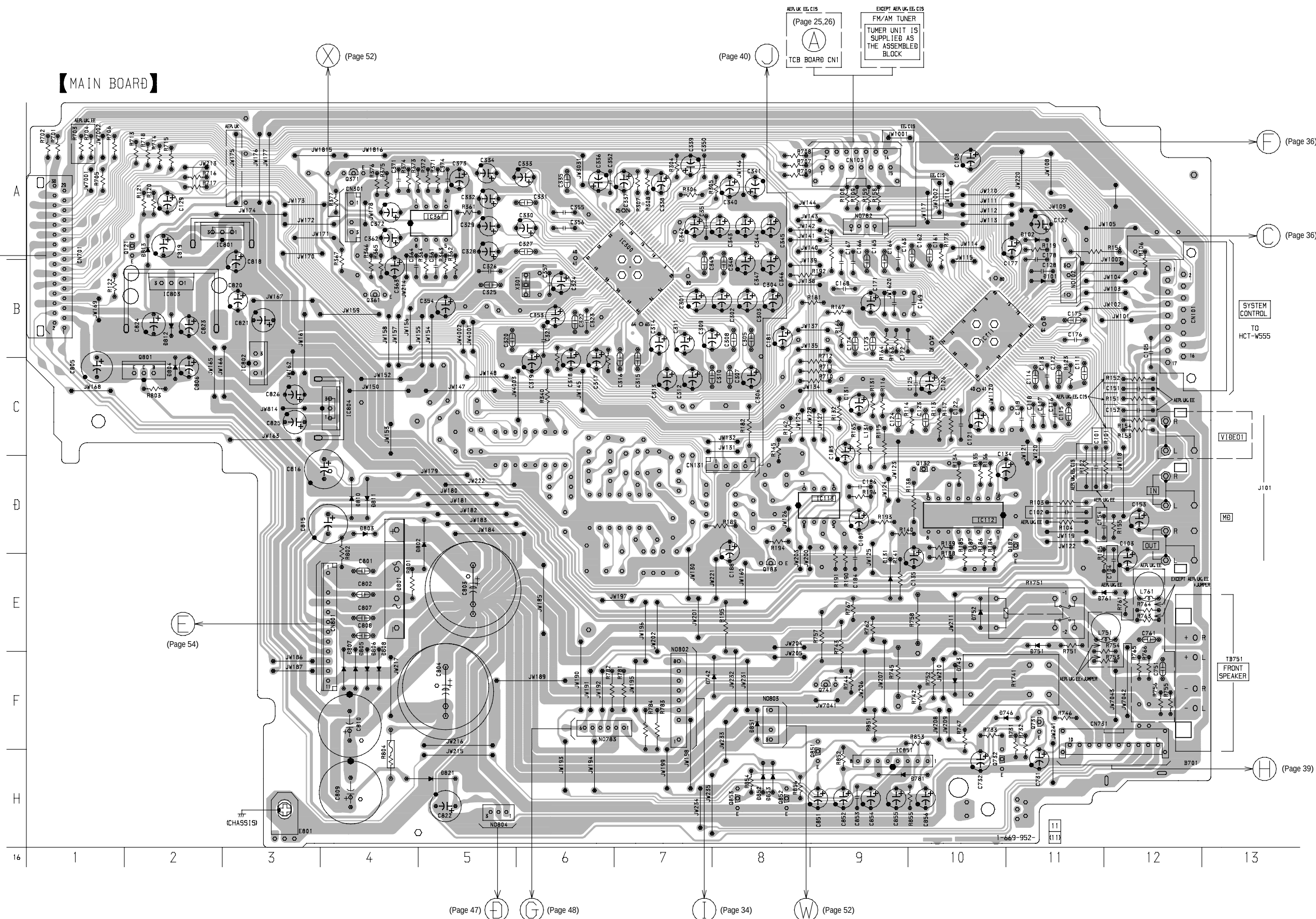
(Page 30)

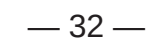
11
(11)

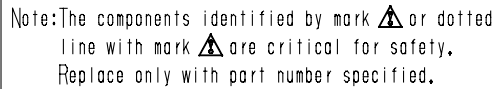
5-6. SCHEMATIC DIAGRAM – TUNER SECTION – (East European, CIS model) • Refer to page 14 for Waveforms.
• Refer to page 56 for IC Block Diagrams.



• Semiconductor Location	
Ref. No.	Location
D101	B-11
D102	B-11
D131	E-9
D401	D-5
D402	D-5
D403	C-9
D751	F-11
D752	F-12
D761	E-12
D781	G-10
D801	E-4
D802	F-5
D803	E-4
D804	C-2
D805	F-4
D806	F-4
D807	F-4
D808	F-4
D810	E-4
D811	E-4
D812	C-2
D813	B-2
D851	G-8
D852	G-8
D853	G-8
IC111	C-10
IC112	E-10
IC113	E-9
IC401	E-7
IC402	D-6
IC801	B-2
IC802	C-3
IC803	B-2
IC804	D-4
IC851	G-9
Q121	B-2
Q132	D-10
Q182	E-11
Q183	E-8
Q401	D-7
Q731	G-11
Q732	G-10
Q801	C-2
Q851	G-9
Q852	H-8
Q853	H-8

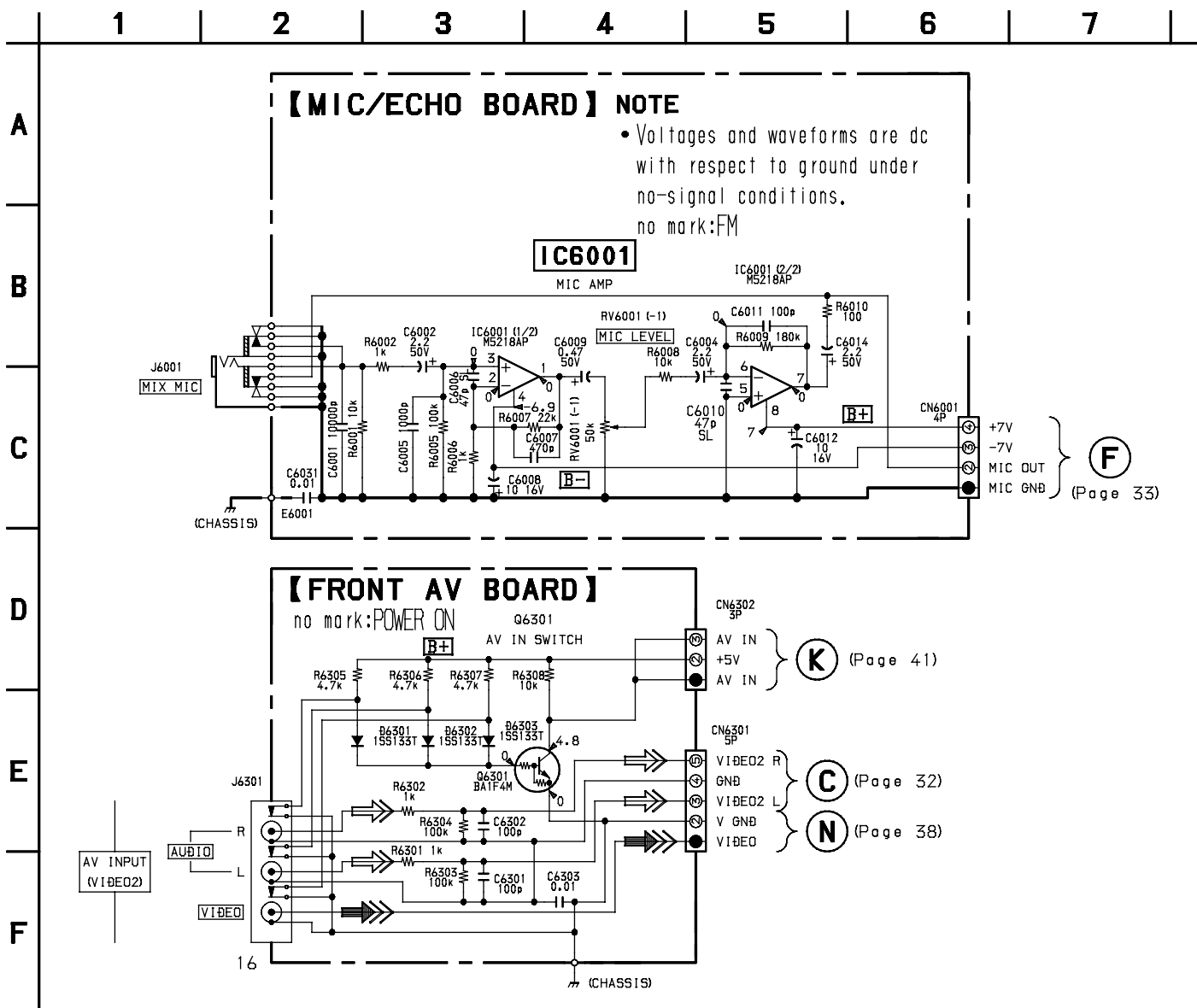






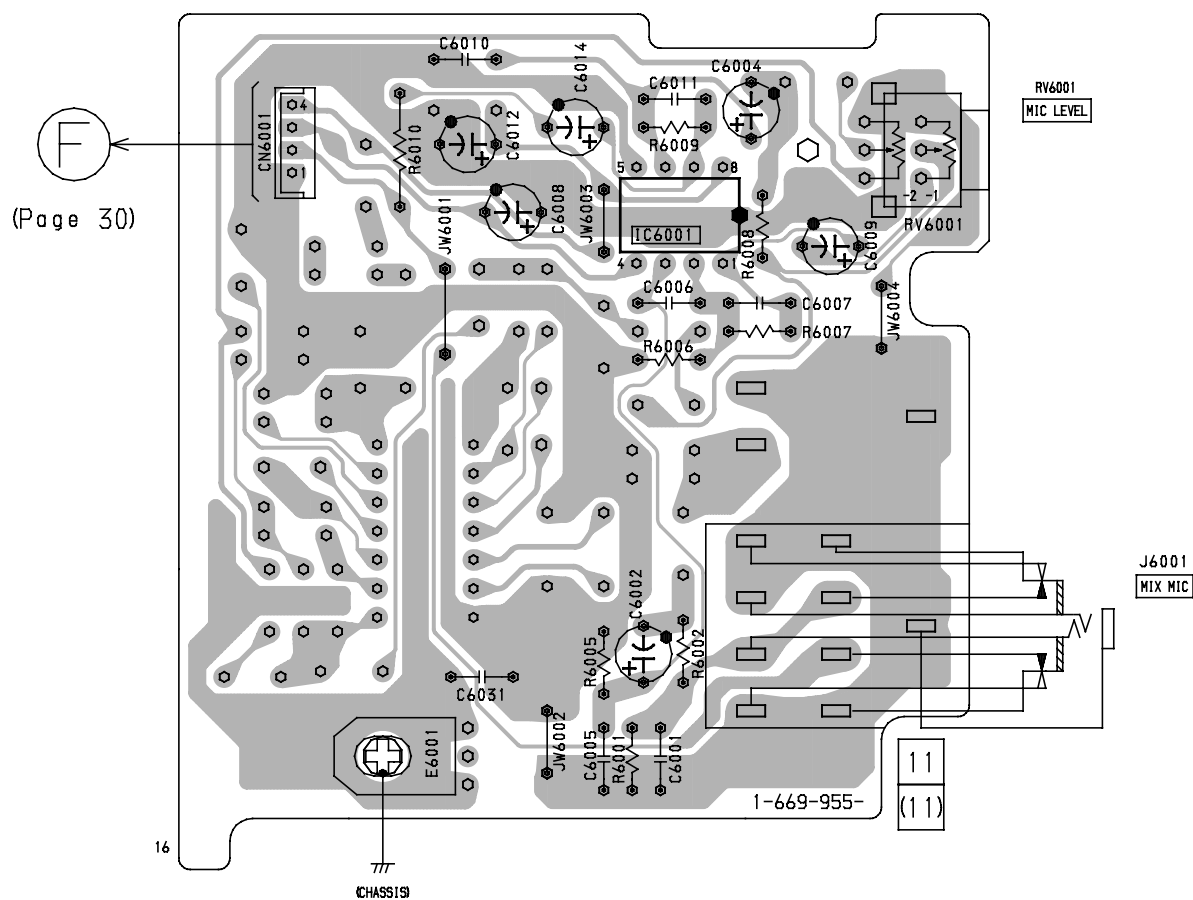
5-10. SCHEMATIC DIAGRAM - AV/MIC
SECTION -

• Refer to page 58 for IC Block Diagrams.

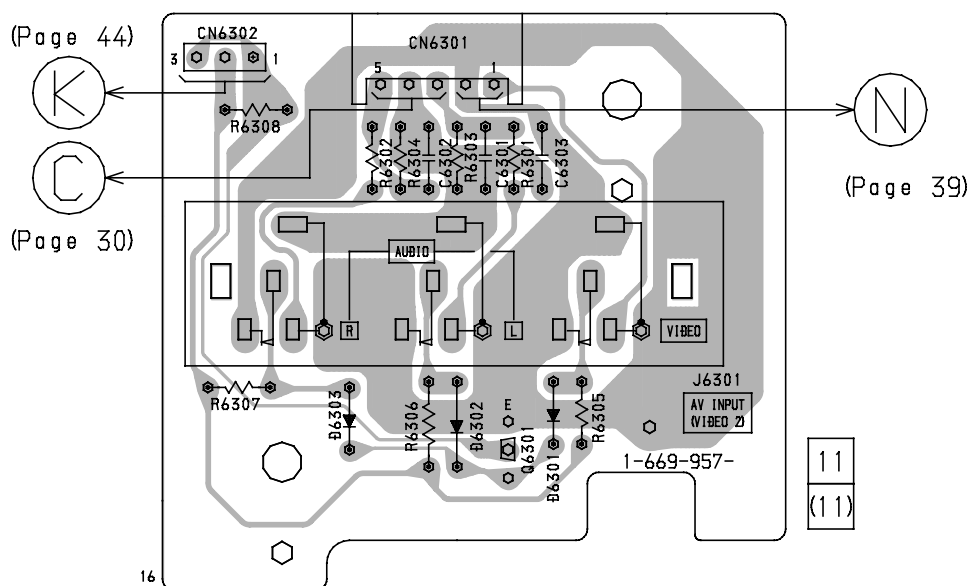


5-11. Printed Wiring Board - AV/MIC Section → Refer to page 12 for Circuit Boards Location.

【MIC/ECHO BOARD】

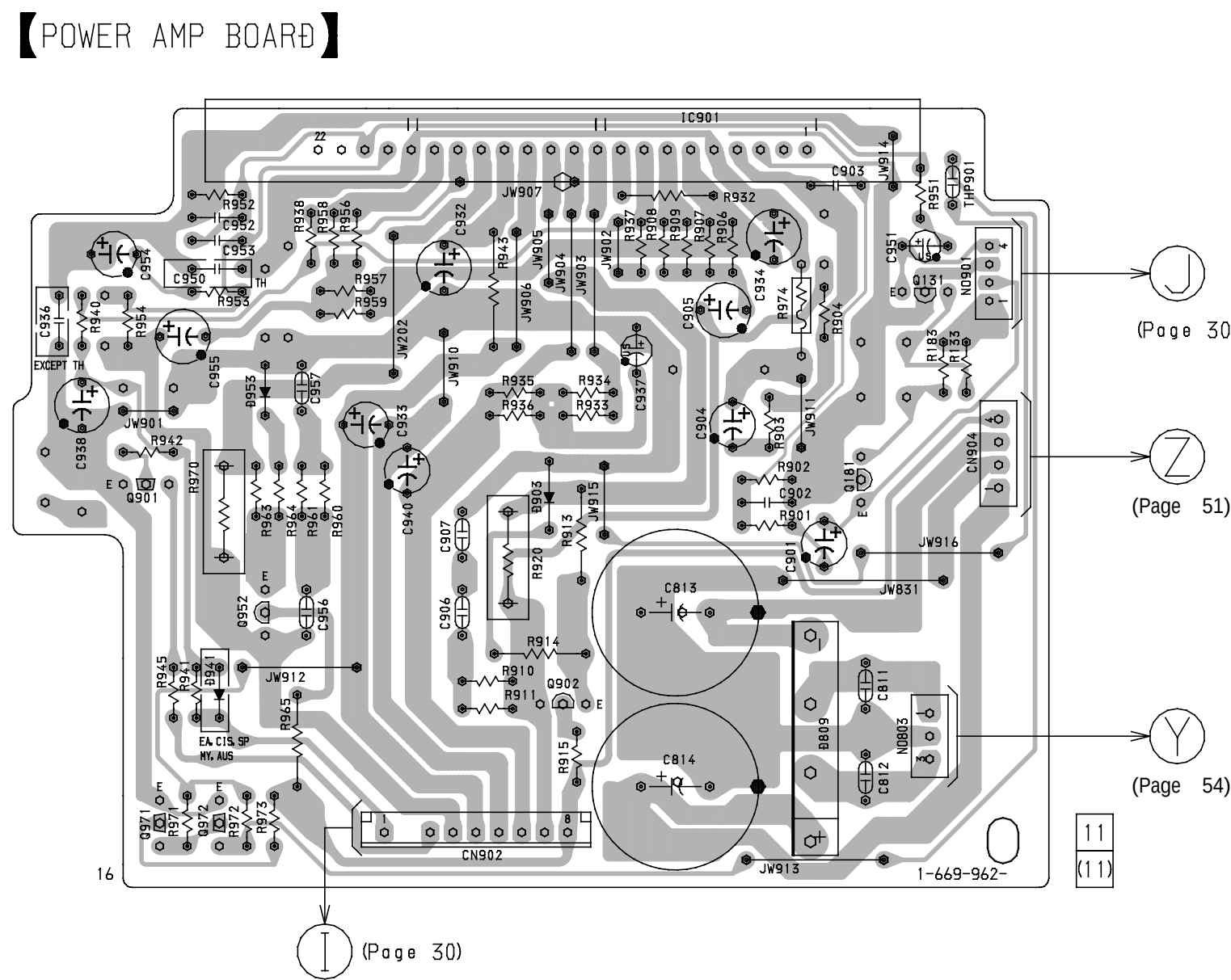
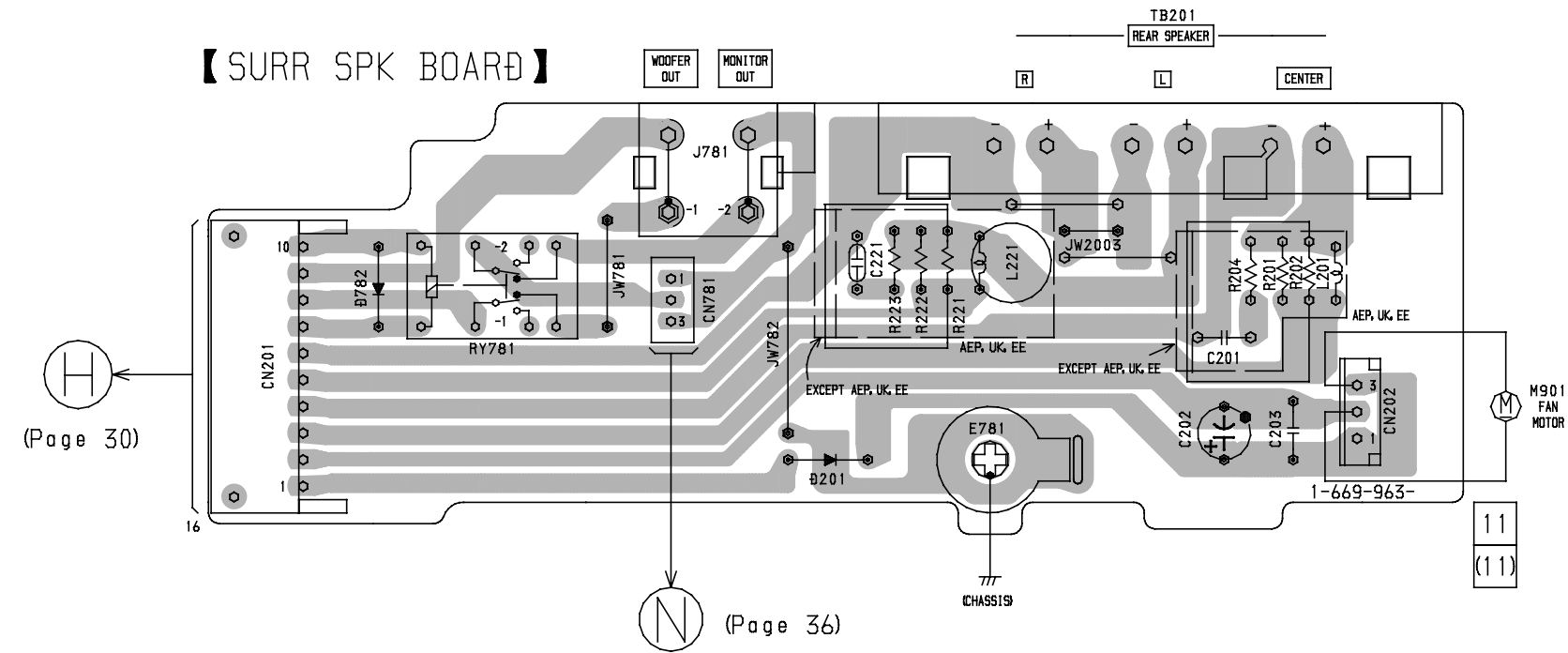


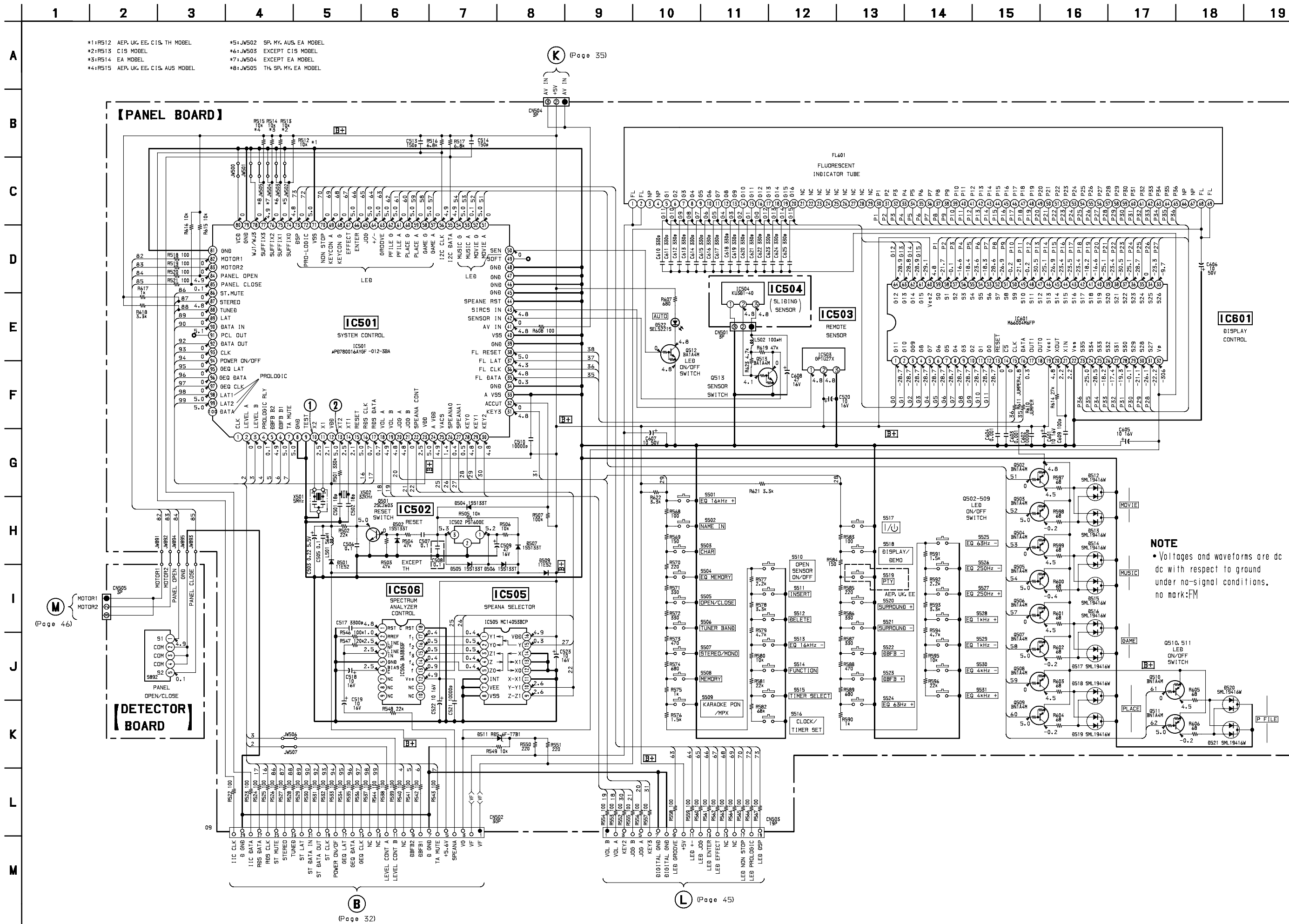
【FRONT AV BOARD】

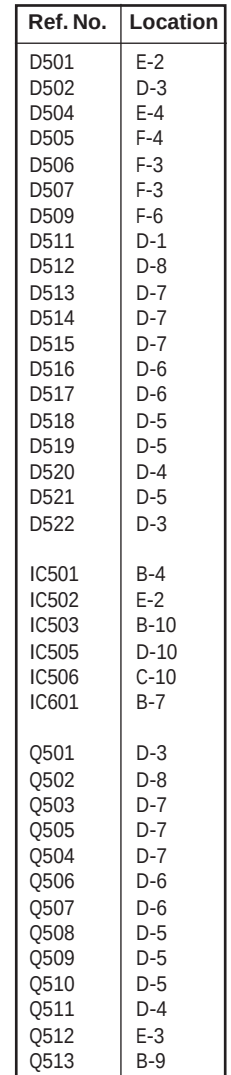




5-13. PRINTED WIRING BOARD – POWER AMP SECTION – • Refer to page 12 for Circuit Boards Location.

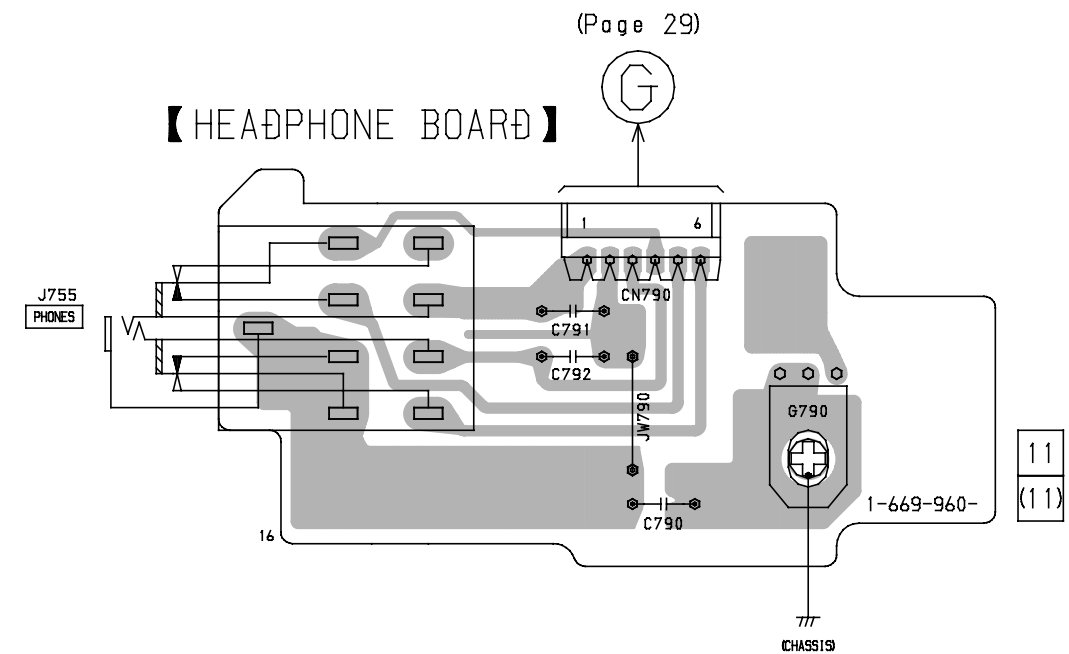
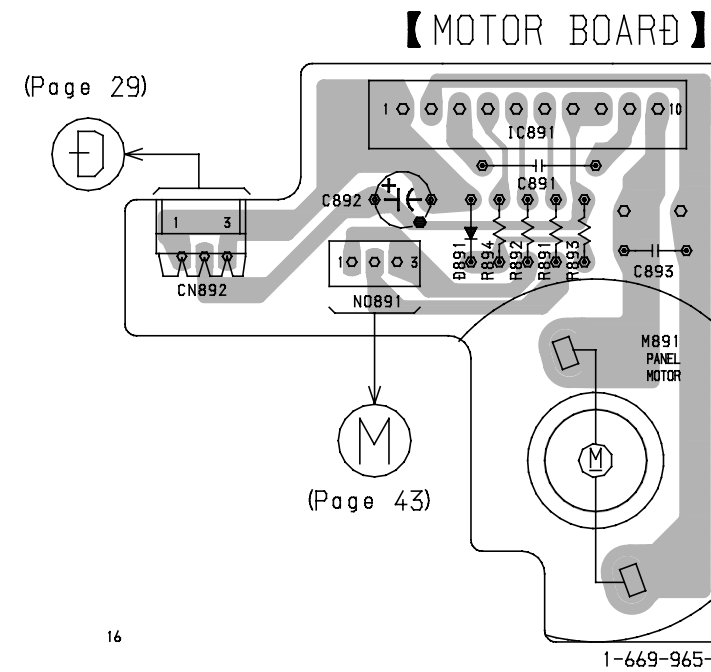
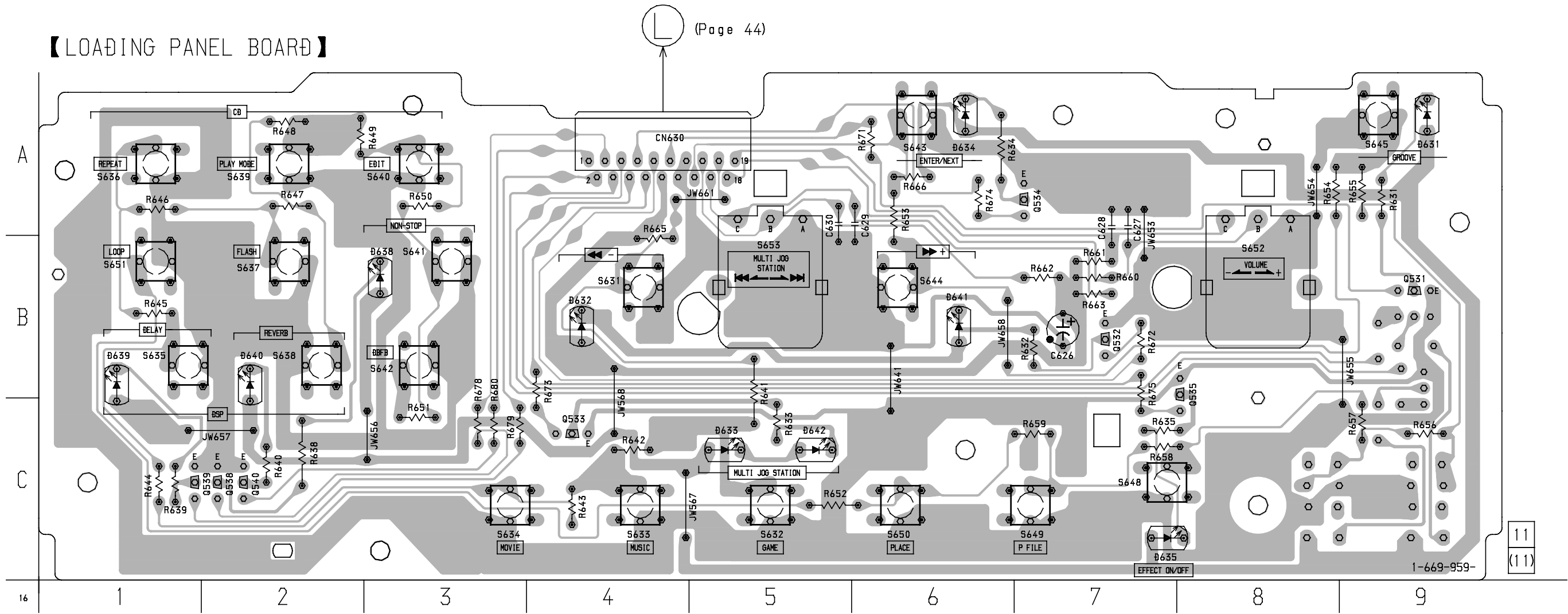






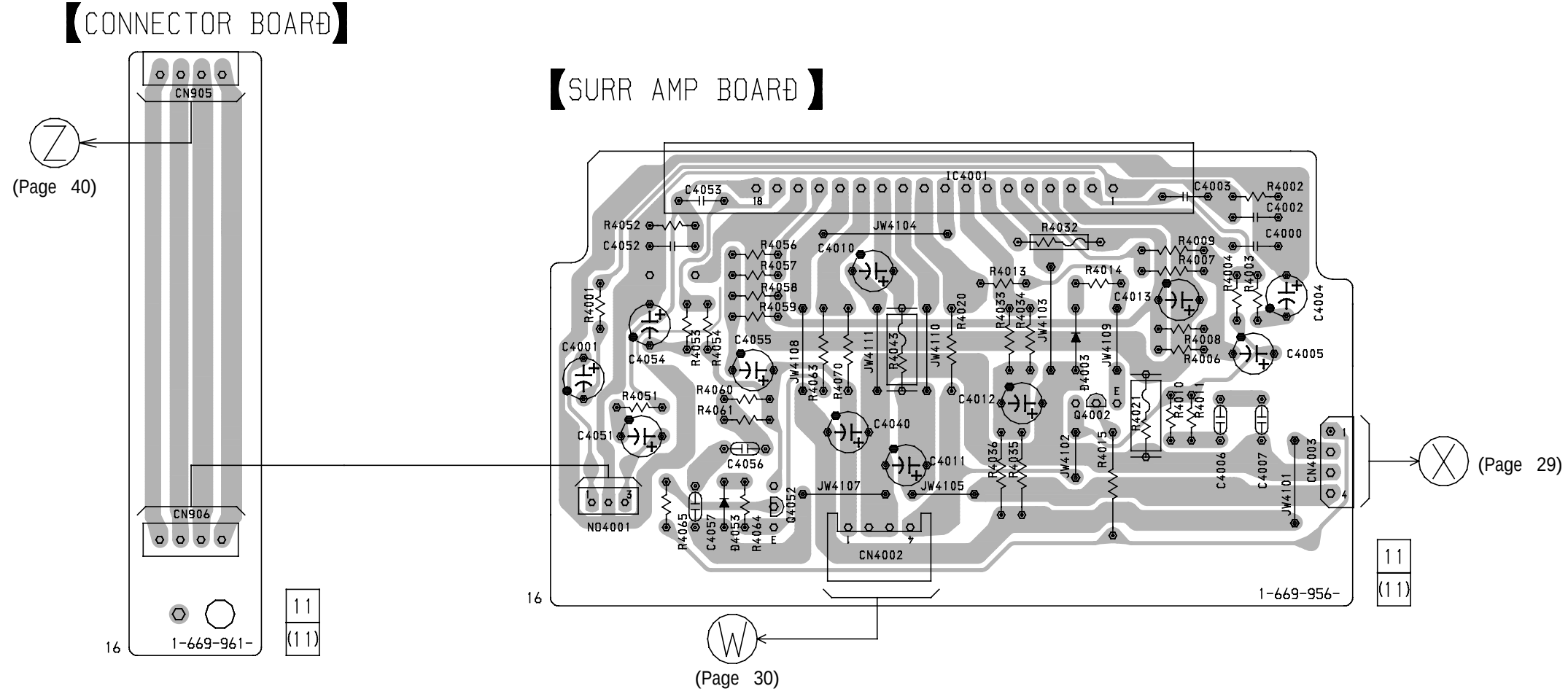


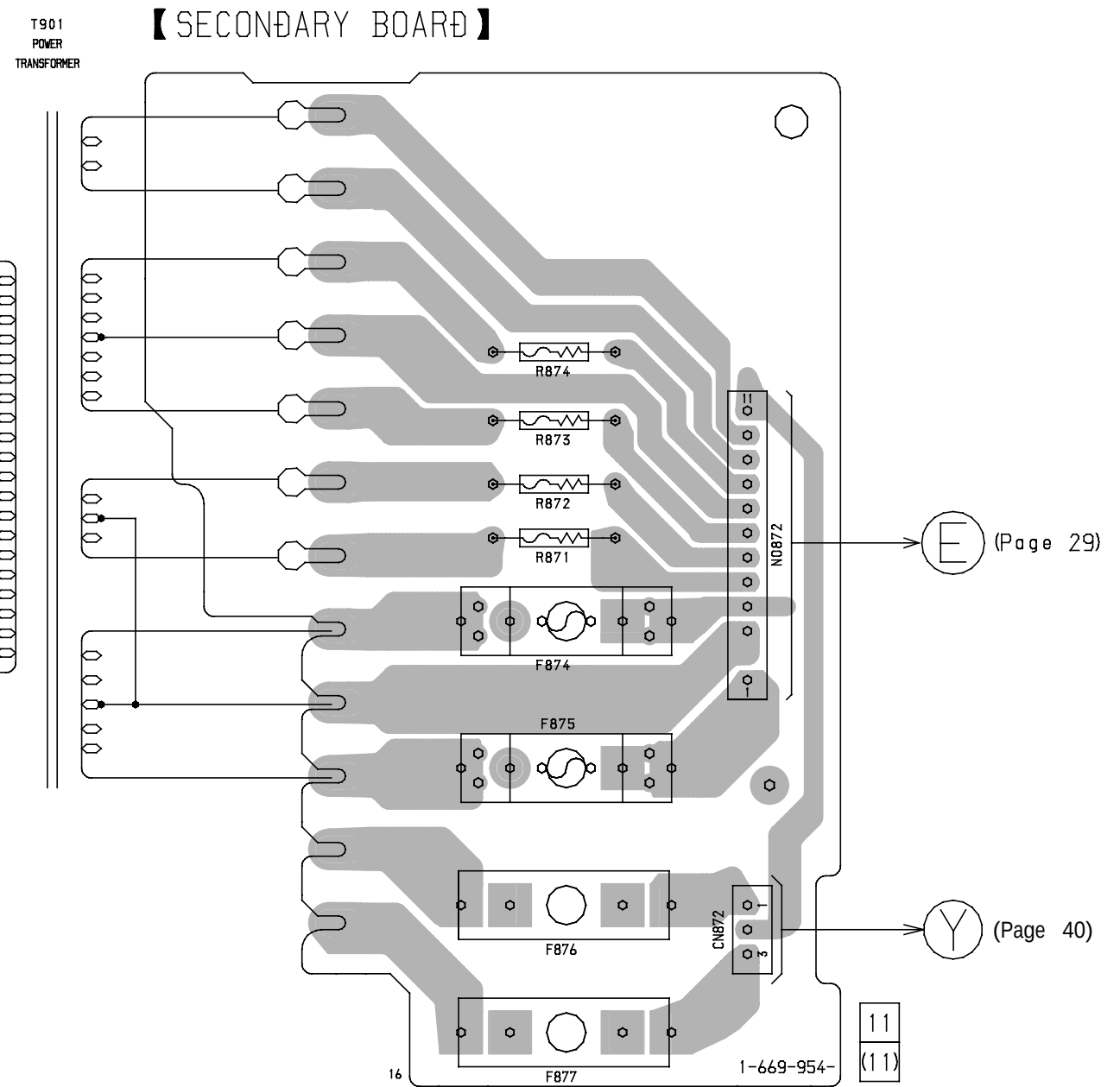
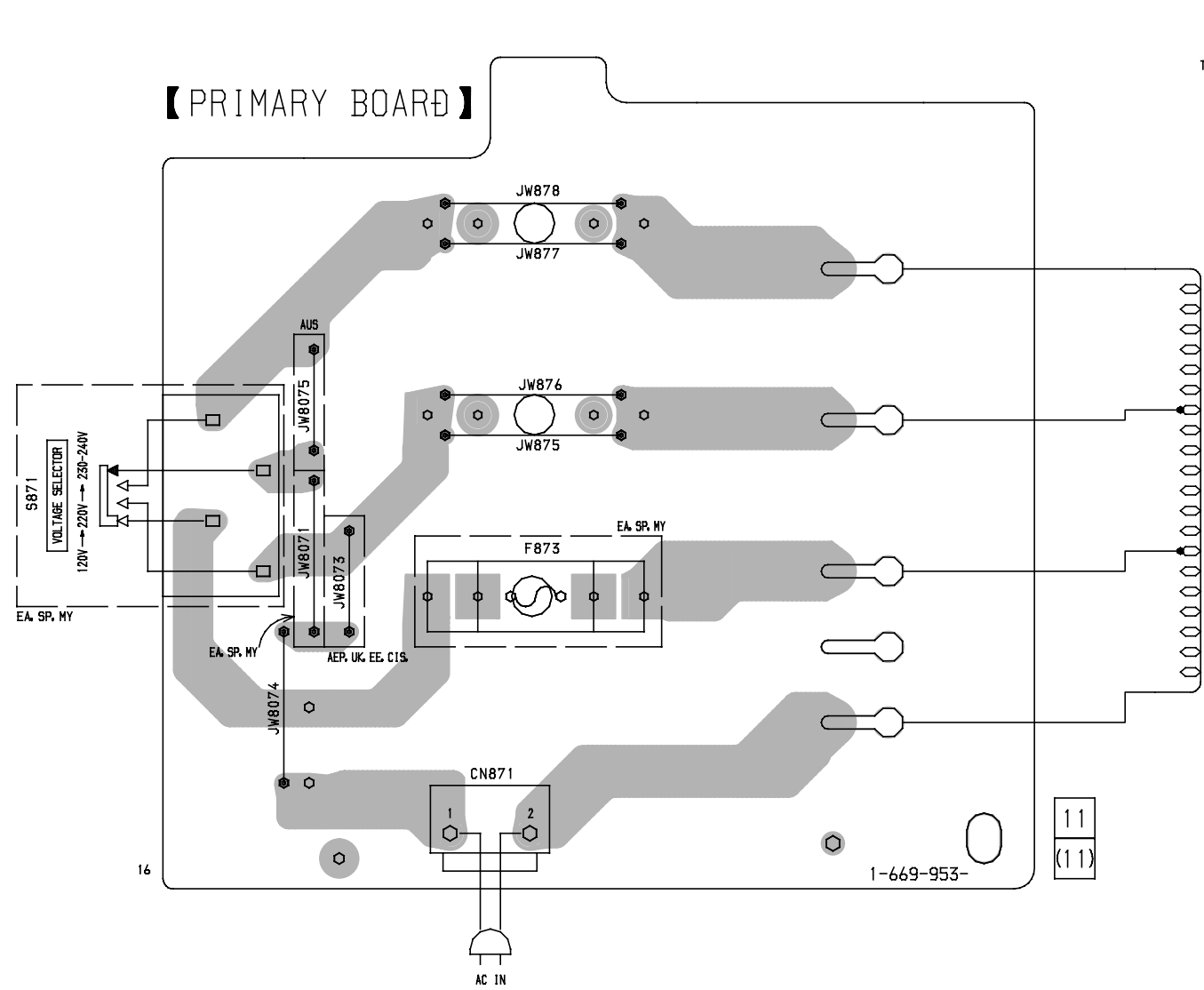
5-17. PRINTED WIRING BOARD – SLIDING PANEL SECTION – • Refer to page 12 for Circuit Boards Location.



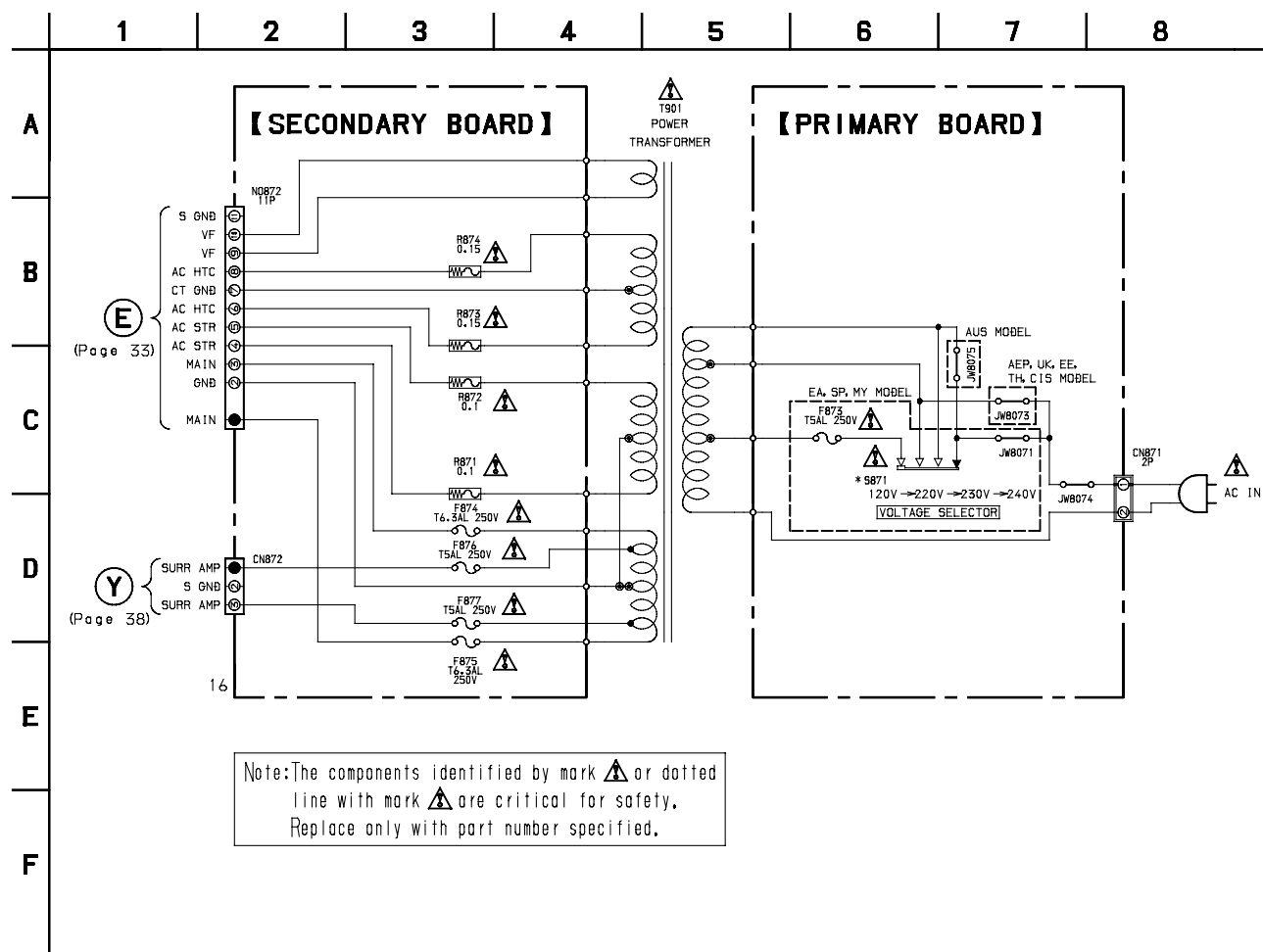


5-19. PRINTED WIRING BOARD – SURROUND AMP SECTION – • Refer to page 12 for Circuit Boards Location.





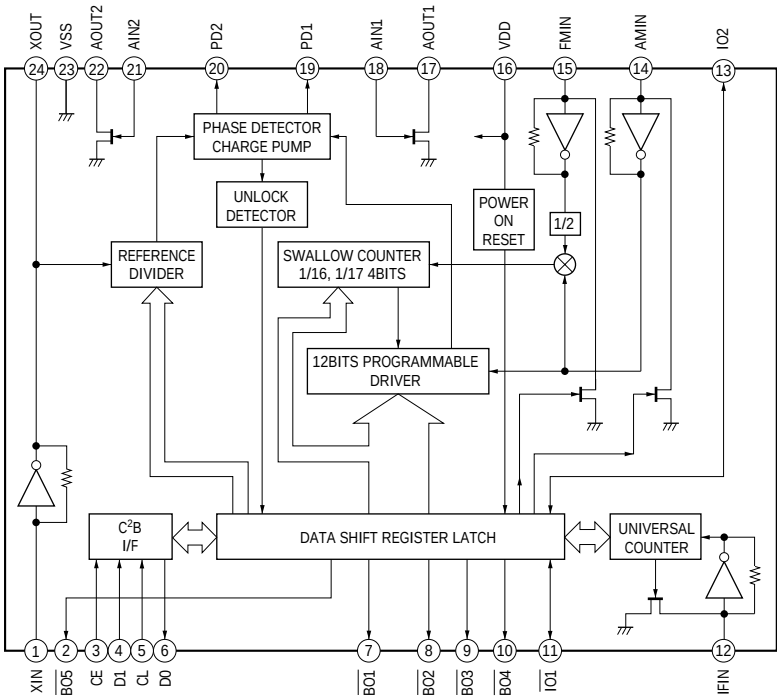
5-21. SCHEMATIC DIAGRAM – TRANS SECTION –



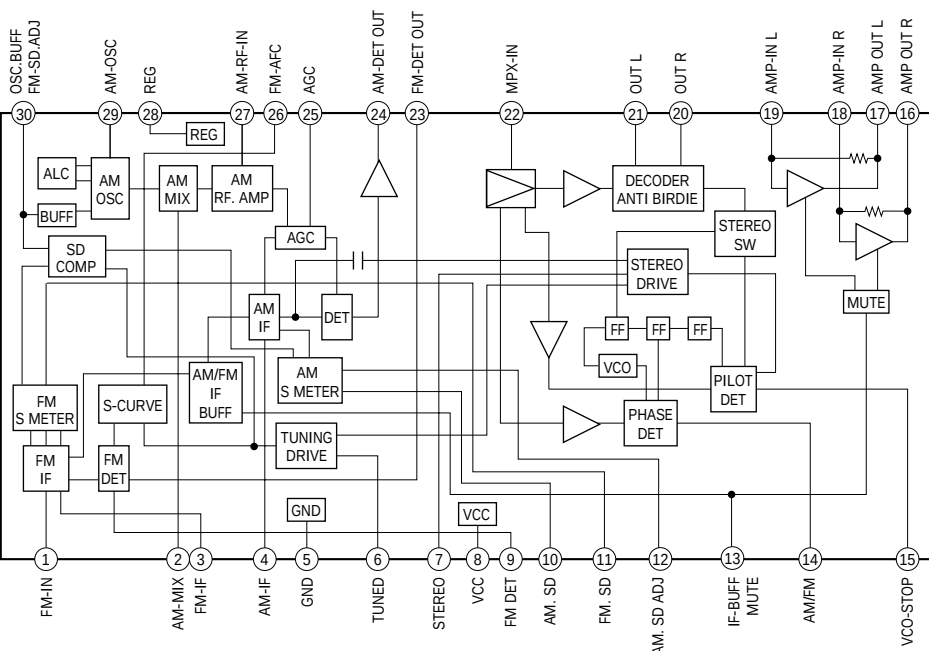
5-22. IC BLOCK DIAGRAMS

• Tuner section

IC21 LC72130



IC41 LA1838



The block diagram illustrates the internal architecture of the AD9850 PLLatinum-1000. Key components include:

- Input/Output Pins:** SUBIN (20), SUBOUT (19), MON (18), VCO (17), LPF1A (16), LPF1B (15), DETIN (14), LPF2A (13), LPF2B (12), GND (11), VCC (1), IN (2), POUT (3), RHC (4), LHC (5), ROUT (6), LOU (7), ST (8), VCO STOP (9), and LAMP (10).
- Internal Blocks:** REGULATOR, AMP (multiple), PHASE, 1/2 (dividers), OSC (oscillator), PHASE COMPARATOR, PHASE COMPARATOR 2, WAVEFORM SEP., GATE, SAMPLE & HOLD BUFFER, MUTE, and TRIGGER.
- Connections:** The diagram shows the flow of signals from the input pins through various internal processing blocks to the output pins. For example, the SUBIN pin is connected to a divider and an oscillator, while the VCO pin is connected to the oscillator and the output filter stages.

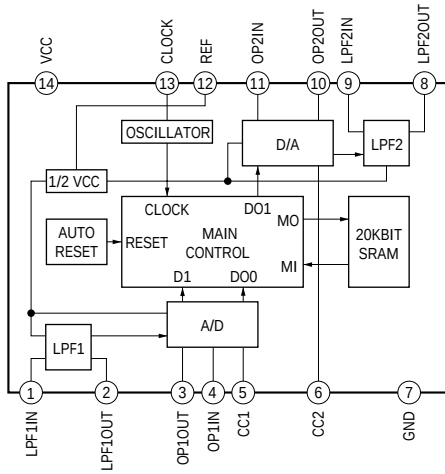
[illegible]

The block diagram illustrates the internal architecture of the AD7714 ADC. Key components include:

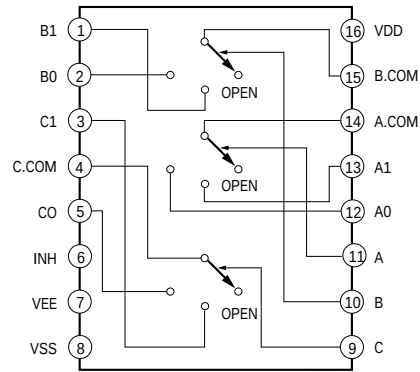
- Input Stage:** The **CIN** pin (7) connects to an **ANTI-ALIASING FILTER**, which feeds into a **57kHz BANDPASS (8th ORDER)** filter. The output of this filter goes through a **RECONSTRUCTION FILTER** and then to the **CONTAS LOOP VARIABLE AND FIXED DIVIDER**.
- Reference and Biasing:** The **VREF** pin (3) provides a reference voltage to the **REFERENCE VOLTAGE** block. The **VDDA** pin (5) and **VSSA** pin (6) provide power to the **REFERENCE VOLTAGE** block and other internal circuitry. The **VP1** pin (6) is also connected to the **REFERENCE VOLTAGE** block.
- Control and Timing:** The **OSC** pin (13) and **OSCLO** pin (14) are connected to the **OSCILLATOR AND DIVIDER**. The **TEST** pin (10) and **TESTLD** pin (9) are connected to the **TEST LOGIC AND OUTPUT SELECTOR SWITCH**.
- Output and Status:** The **QUAL** pin (1) and **RDCL** pin (16) are connected to the **QUALITY BIT GENERATOR**. The **RDCA** pin (2) and **RDCL** pin (16) are connected to the **DEFFERENTIAL DECODER**. The **SCOUT** pin (8) is connected to the **CONTAS LOOP VARIABLE AND FIXED DIVIDER**.
- Internal Blocks:** The **CONTAS LOOP VARIABLE AND FIXED DIVIDER** is connected to the **BIPHASE SYMBOL DECODER**, which in turn connects to the **DEFFERENTIAL DECODER**. The **DEFFERENTIAL DECODER** also connects to the **QUALITY BIT GENERATOR**.

• Main (1/2) section

IC401 M65850P

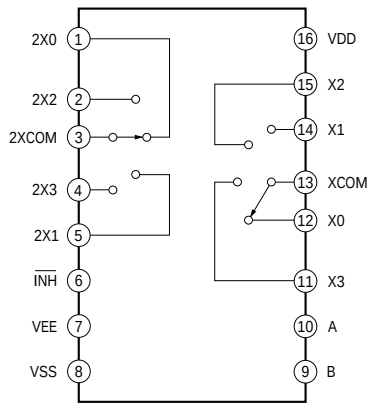


IC402 MC14053BCP

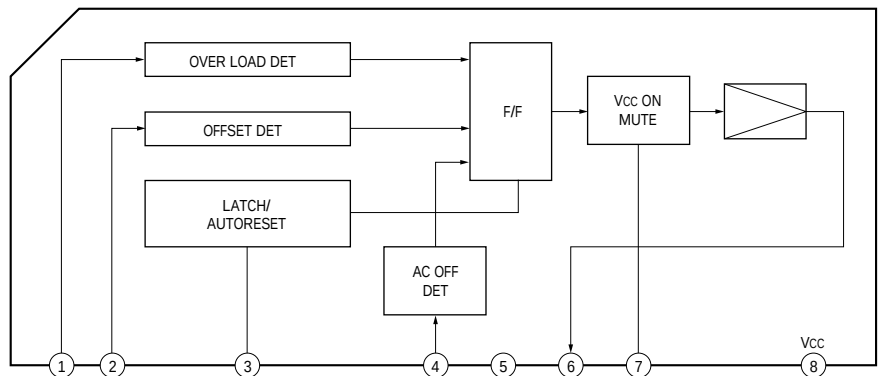


• Main (2/2) section

IC112 MC14052BCP

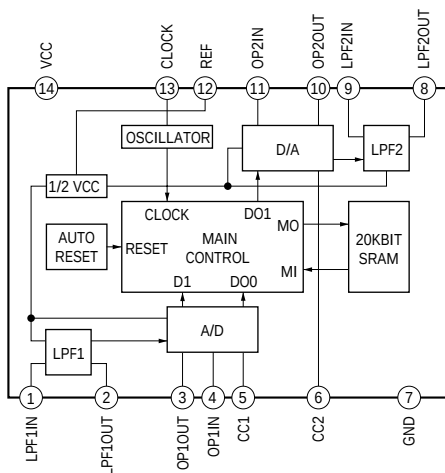


IC851 uPC1237HA



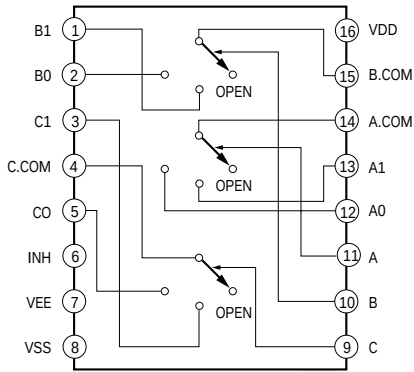
• MIC/ECHO section

IC6002 M65850P

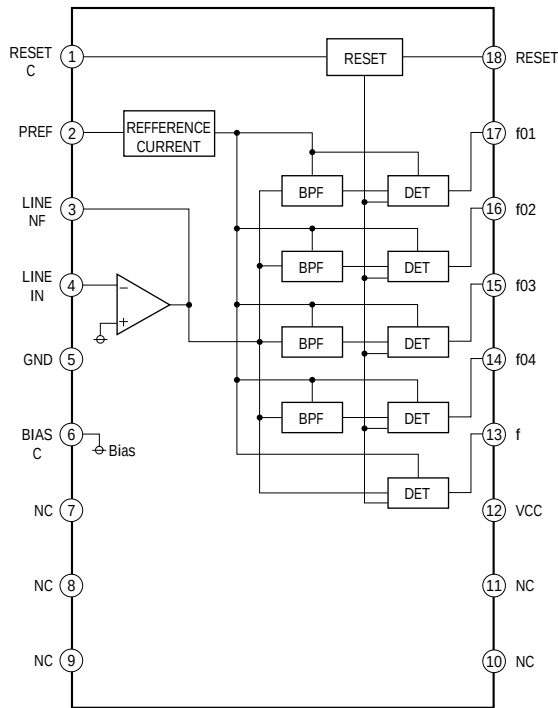


• Display section

IC505 MC14053BCP

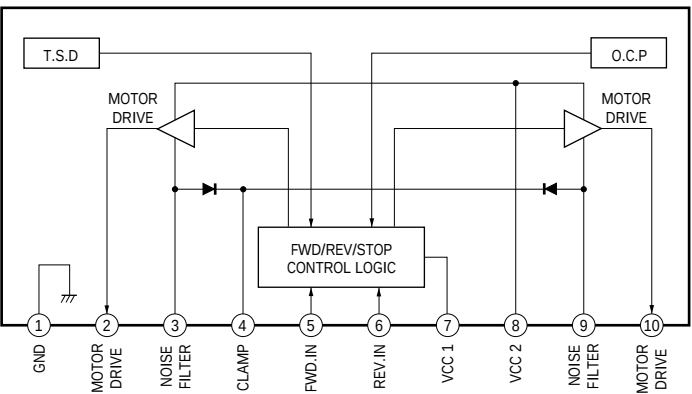


IC506 BA3833F



• Panel/Motor section

IC891 LB1641



5-23. IC PIN FUNCTION

• IC501 SYSTEM CONTROL (uPD780016AYGF-012-3BA)

Pin No.	Pin Name	I/O	Description
1	CLK	O	Not used
2	LEVEL A	O	Surround level A signal output
3	LEVEL B	O	Surround level B signal output
4	PROLOGIC RLY	O	Not used
5	DBFB B2	O	DBFB level 2 signal output
6	DBFB B1	O	DBFB level 1 signal output
7	TA MUTE	O	Mute signal output
8	GND	—	Ground
9	TEST	—	Test terminal (Connected to ground)
10	X2	O	X' tal (5MHz)
11	X1	I	
12	VDD	—	Power supply (+5V)
13	XT2	O	X' tal (32kHz)
14	XT1	I	
15	RESET	I	Reset signal input
16	RDS CLK	I	RDS clock input
17	RDS DATA	I	RDS data input
18	VOL A	I	Rotary encoder (VOLUME) pulse input
19	VOL B	I	
20	JOG A	I	Rotary encoder (MULTI JOG STATION) pulse input
21	JOG B	I	
22	SPEANA CONT	O	Spectrum analyzer control output
23	VDD	—	Power supply (+5V)
24	A VDD	—	Analog power supply (+5V)
25	VACS	I	Audio input for VACS control
26	SPEANA0	I	Spectrum analyzer data input
27	SPEANA1	I	
28	KEY0	I	Key data input
29	KEY1	I	
30	KEY2	I	
31	KEY3	I	
32	ACCUT	I	Back up signal input
33	A VSS	—	Analog ground
34	GND	—	Ground
35	FL DATA	O	FL data output
36	FL CLK	O	FL clock output
37	FL LAT	O	FL latch output
38	FL RESET	O	FL reset output
39	GND	—	Ground
40	VSS	—	Ground

• Abbreviation

FL : Fluorescent indicator tube

Pin No.	Pin Name	I/O	Description
41	AV IN	I	AV INPUT (VIDEO 2) switch input
42	SENSOR IN	I	Sliding (panel) sensor signal input
43	SIRCS IN	I	Remote sensor signal input
44	SPEANE RST	O	Spectrum analyzer reset output
45	GND	—	Ground
46	GND	—	
47	GND	—	
48	GND	—	
49	SOFT	O	Soft test terminal
50	SEN	O	Audio indicator output
51	MOVIE A	O	LED driver output
52	MOVIE G	O	
53	MUSIC A	O	
54	MUSIC G	O	
55	I2C DATA	I/O	Serial data input/output
56	I2C CLK	I/O	Serial clock input/output
57	GAME A	O	LED driver output
58	GAME G	O	
59	PLACE A	O	
60	PLACE G	O	
61	PFILE A	O	
62	PFILE G	O	
63	GROOVE	O	
64	+/-	O	
65	JOG	O	
66	ENTER	O	
67	EFFECT	O	
68	KEYCON G	O	Not used
69	KEYCON A	O	
70	NON STOP	O	LED driver output
71	VSS	—	Ground
72	DELAY	O	LED driver output
73	REVER B	O	
74	SUFFIX0	I	Destination terminal
75	SUFFIX1	I	
76	SUFFIX2	I	
77	SUFFIX3	I	
78	WJ1/WJ3	I	Model select terminal
79	GND	—	Ground
80	VCD	I	VCD select terminal “L”: NON-VCD (Connected to ground)

Pin No.	Pin Name	I/O	Description
81	GND	—	Ground
82	MOTOR1	O	Panel motor control output
83	MOTOR2	O	
84	PANEL OPEN	O	Panel open switch output
85	PANEL CLOSE	O	Panel close switch output
86	ST. MUTE	O	ST mute signal output
87	STEREO	I	Stereo detection input for tuner
88	TUNED	I	Tuner detection input for tuner
89	LAT	O	Tuner PLL latch output
90	DATA IN	I	Tuner PLL data input
91	PCL OUT	O	Sub clock output
92	DATA OUT	O	Tuner PLL data output
93	CLK	O	Tuner clock output
94	POWER ON/OFF	O	Power on/off control output
95	GEQ LAT	O	GEQ latch output
96	GEQ DATA	O	GEQ data output
97	GEQ CLK	O	GEQ clock output
98	LAT1	O	Not used
99	LAT2	O	
100	DATA	O	

- Abbreviation

GEQ : Graphic Equalizer

PLL : Phase Locked Loop

SECTION 6 EXPLODED VIEWS

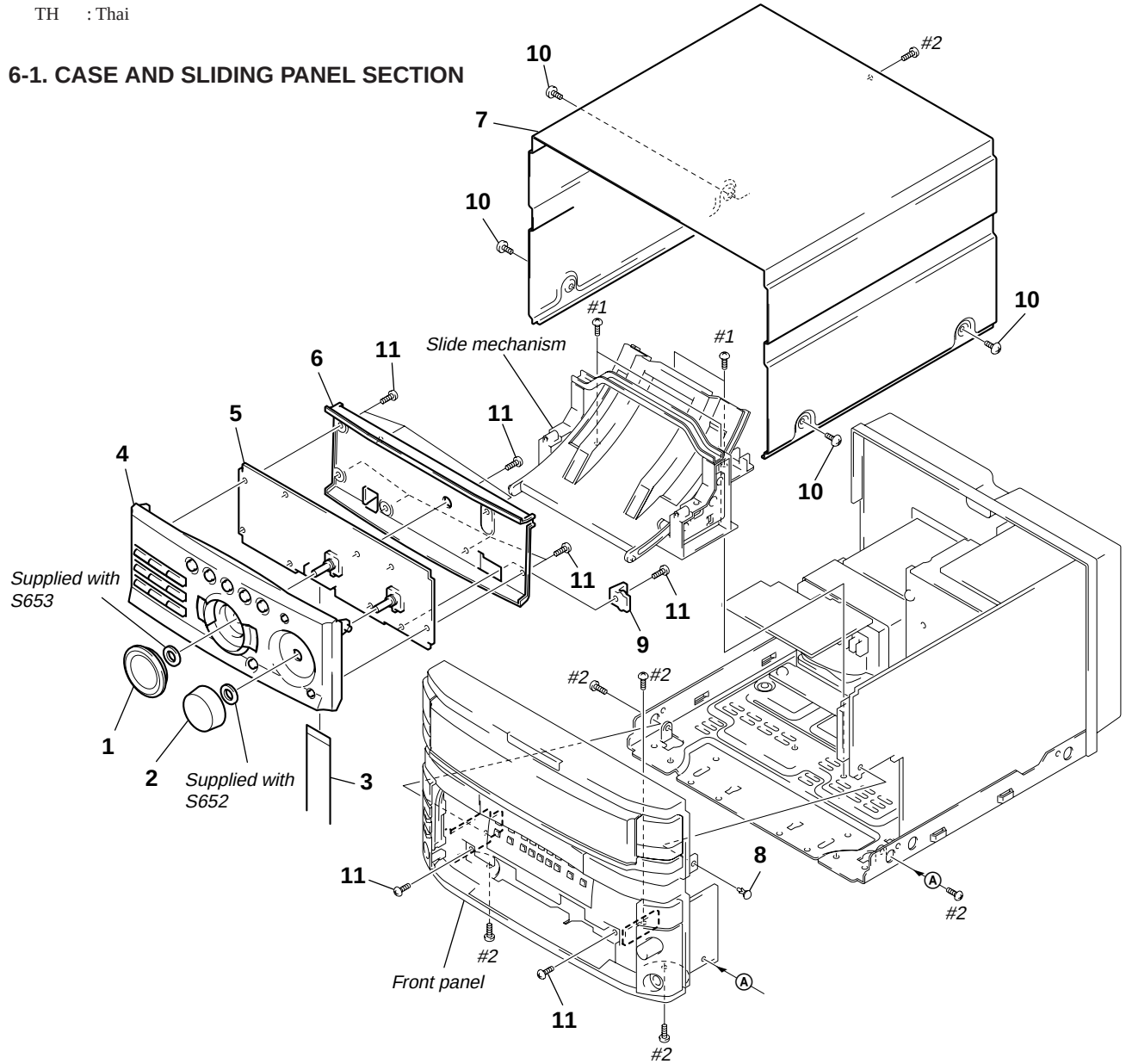
NOTE:

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
 EE : East European
 EA : Saudi Arabia
 SP : Singapore
 MY : Malaysia
 AUS : Australian
 TH : Thai

- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

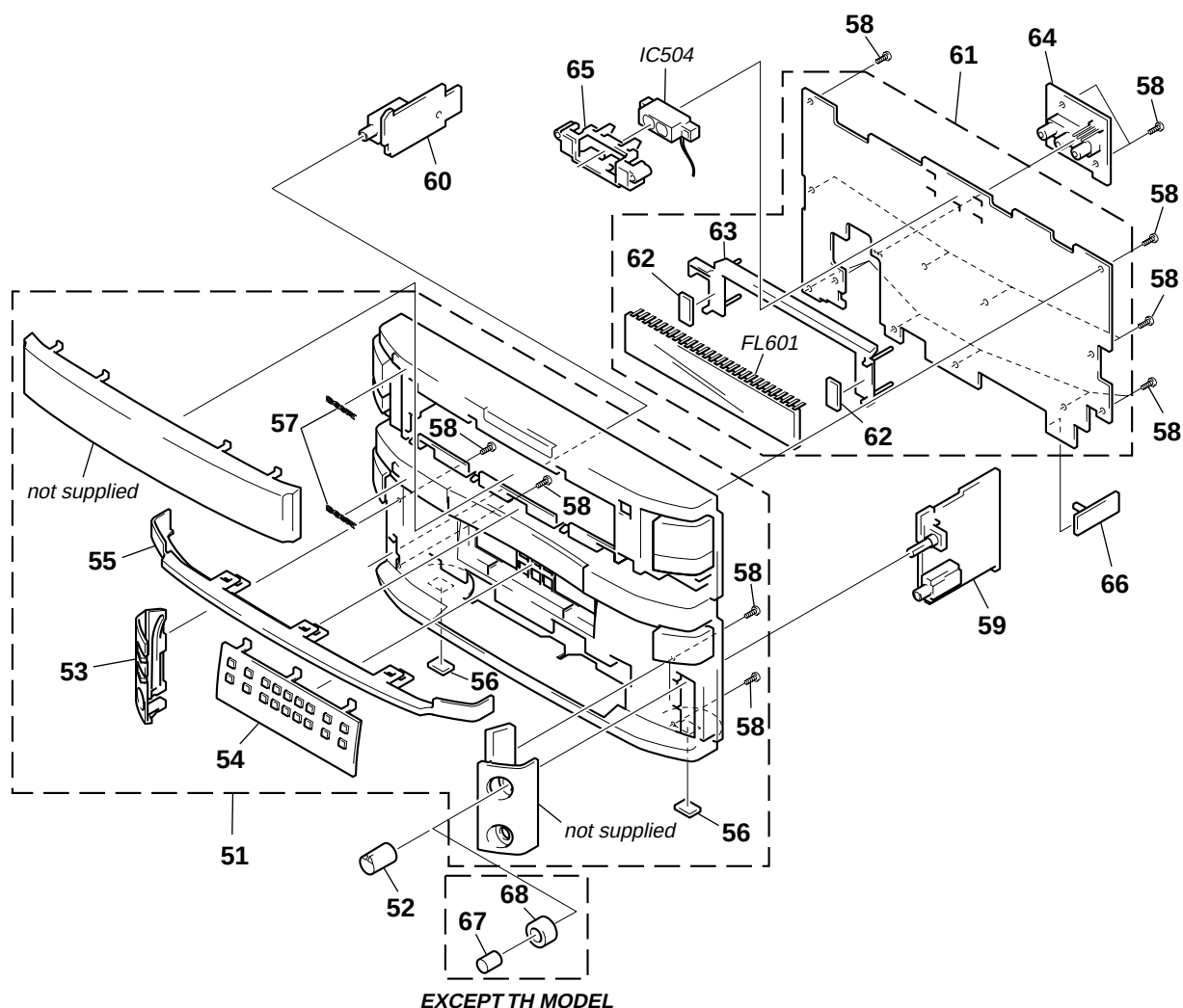
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

6-1. CASE AND SLIDING PANEL SECTION



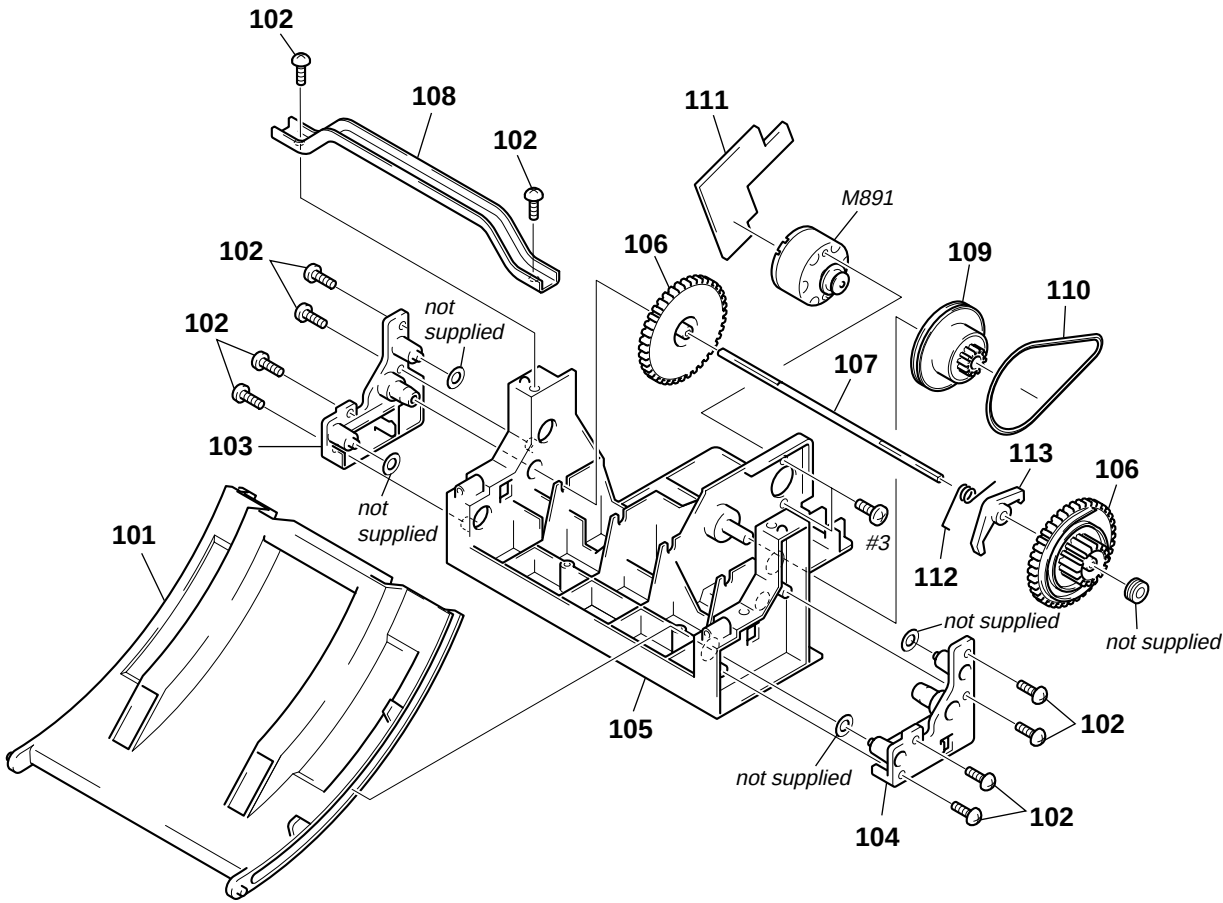
Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	4-900-825-01	KNOB (JOG)		* 7	4-900-858-01	CASE	
2	4-900-826-01	KNOB (VOLUME)		8	4-812-134-00	RIVET (DIA. 3.5), NYLON	
3	1-773-125-11	WIRE (FLAT TYPE) (19 CORE)		* 9	4-900-852-01	HOLDER LEVEL	
4	X-4950-007-1	SLIDING PANEL SUB ASSY		10	3-363-099-01	SCREW (CASE 3 TP2)	
* 5	1-669-959-11	LOADING PANEL BOARD		11	4-951-620-01	SCREW (2.6 × 8), +BVTP	
6	4-900-855-01	COVER					

6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	X-4950-006-1	FRONT PANEL ASSY (EA, SP, MY, TH, AUS)		* 61	A-4414-229-A	PANEL BOARD, COMPLETE (AEP, UK, EE)	
51	X-4950-008-1	FRONT PANEL ASSY (AEP, UK, EE, CIS)		* 61	A-4414-536-A	PANEL BOARD, COMPLETE (AUS)	
52	4-900-832-01	KNOB (MIC)		* 61	A-4414-541-A	PANEL BOARD, COMPLETE (CIS)	
53	X-4949-993-1	ESCUTCHEON (L) ASSY		* 61	A-4414-786-A	PANEL BOARD, COMPLETE (TH)	
54	X-4949-994-1	ESCUTCHEON (EQ) ASSY		* 61	A-4417-305-A	PANEL BOARD, COMPLETE (EA)	
55	X-4950-002-1	ESCUTCHEON (ST) ASSY (AEP, UK, EE, CIS)		* 62	4-932-810-11	CUSHION (FL)	
56	4-977-358-11	CUSHION		* 63	4-900-849-01	HOLDER (FL)	
57	4-962-708-11	EMBLEM (4-A), SONY		* 64	1-669-957-11	FRONT AV BOARD	
58	4-951-620-01	SCREW (2.6 × 8), +BVTP		* 65	4-210-042-01	BRACKET (SENSOR)	
* 59	A-4414-202-A	MIC/ECHO BOARD, COMPLETE (EXCEPT TH)		* 66	1-669-964-11	DETECTOR BOARD	
* 59	A-4414-778-A	MIC/ECHO BOARD, COMPLETE (TH)		67	4-900-868-01	KNOB (CENTER) (EXCEPT TH)	
* 60	1-669-960-11	HEADPHONE BOARD		68	4-900-867-01	KNOB (CONTROL) (EXCEPT TH)	
* 61	A-4414-223-A	PANEL BOARD, COMPLETE (SP, MY)		FL601	1-517-775-11	INDICATOR TUBE, FLUORESCENT	
				IC504	8-719-070-85	DIODE KU381-40	

6-3. SLIDE MECHANISM SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
101	4-900-844-01	LEVEL SLIDER		108	4-900-864-01	BRACKET TOP	
102	4-951-620-01	SCREW (2.6 × 8), +BVTP		109	4-900-847-01	GEAR (2)	
103	X-4950-394-1	HOLDER (L) ASSY		110	3-344-059-01	BELT (L)	
104	X-4950-395-1	HOLDER (R) ASSY		* 111	1-669-965-11	MOTOR BOARD	
105	4-900-845-01	BRACKET SLIDER		112	4-212-966-01	SPRING LABEL	
106	4-900-846-01	GEAR (1)		113	4-212-965-01	STOPPER LABEL	
107	4-900-862-01	SHAFT CENTER		M891	A-4660-926-A	MOTOR (CDM) ASSY	

This exploded view diagram illustrates the internal components of the HP Z440 G2 Mini PC and their assembly sequence. The components are labeled as follows:

- Power Connectors:** 160 (AEP, EE, CIS, EA, SP, MY), 160 (AUS), 160 (TH), 160 (UK), 161 (EA, SP, MY).
- Internal Components:** 155, 156, 157, 158, 159, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 9

The components identified by mark or dotted line with mark  are critical for safety.
Replace only with part number specified.

SECTION 7 ELECTRICAL PARTS LIST

CONNECTOR

DETECTOR

FRONT AV

HEADPHONE

LOADING PANEL

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- CAPACITORS:
uF: μ F
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- COILS
uH: μ H
- Abbreviation
EE : East European
EA : Saudi Arabia
SP : Singapore
MY : Malaysia
AUS : Australian
TH : Thai

- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...

When indicating parts by reference number, please include the board name.

The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	1-669-961-11	CONNECTOR BOARD *****				< RESISTOR >	
		< CONNECTOR >		R6301	1-249-417-11	CARBON 1K 5%	1/4W F
				R6302	1-249-417-11	CARBON 1K 5%	1/4W F
				R6303	1-249-441-11	CARBON 100K 5%	1/4W
* CN905	1-691-174-11	CONNECTOR (BOARD TO BOARD) 4P		R6304	1-249-441-11	CARBON 100K 5%	1/4W
CN906	1-691-161-11	PIN, CONNECTOR 4P		R6305	1-249-425-11	CARBON 4.7K 5%	1/4W F

*	1-669-964-11	DETECTOR BOARD *****		R6306	1-249-425-11	CARBON 4.7K 5%	1/4W F
				R6307	1-249-425-11	CARBON 4.7K 5%	1/4W F
* CN505	1-568-941-11	PIN, CONNECTOR 3P		R6308	1-249-429-11	CARBON 10K 5%	1/4W
		< SWITCH >		*****			
S892	1-571-300-21	SWITCH, ROTARY (PANEL OPEN/CLOSE)		*	1-669-960-11	HEADPHONE BOARD *****	
*****						< CAPACITOR >	
*	1-669-957-11	FRONT AV BOARD *****		C790	1-162-306-11	CERAMIC 0.01uF 20%	16V
		< CAPACITOR >		C791	1-162-294-31	CERAMIC 0.001uF 10%	50V
				C792	1-162-294-31	CERAMIC 0.001uF 10%	50V
						< CONNECTOR >	
C6301	1-162-282-31	CERAMIC 100PF 10%	50V	* CN790	1-568-944-11	PIN, CONNECTOR 6P	
C6302	1-162-282-31	CERAMIC 100PF 10%	50V			< EARTH >	
C6303	1-162-306-11	CERAMIC 0.01uF 20%	16V				
		< CONNECTOR >		* G790	1-537-738-21	TERMINAL, EARTH	
* CN6301	1-564-520-11	PLUG, CONNECTOR 5P				< JACK >	
* CN6302	1-560-666-00	PIN, CONNECTOR 3P		J755	1-770-226-11	JACK (LARGE TYPE) (PHONE)	
		< DIODE >		*****			
D6301	8-719-911-19	DIODE 1SS119		*	1-669-959-11	LOADING PANEL BOARD *****	
D6302	8-719-911-19	DIODE 1SS119				< CAPACITOR >	
D6303	8-719-911-19	DIODE 1SS119					
		< JACK >		C626	1-124-584-00	ELECT 100uF 20%	10V
J6301	1-784-901-11	JACK, PIN 3P (AV INPUT)		C627	1-162-306-11	CERAMIC 0.01uF 20%	16V
		< TRANSISTOR >		C628	1-162-306-11	CERAMIC 0.01uF 20%	16V
Q6301	8-729-900-36	TRANSISTOR DTC124ES		C629	1-162-306-11	CERAMIC 0.01uF 20%	16V
				C630	1-162-306-11	CERAMIC 0.01uF 20%	16V
						< CONNECTOR >	
				CN630	1-569-308-11	SOCKET, CONNECTOR (L TYRE) 19P	

LOADING PANEL

MAIN

Ref. No.	Part No.	Description	Remarks
< DIODE >			
D631	8-719-046-39	DIODE SEL5821A-TH15 (GROOVE)	
D632	8-719-046-44	DIODE SEL5221S (REW)	
D633	8-719-058-04	DIODE SEL5223S-TP15 (MULTI JOG STATION)	
D634	8-719-046-44	DIODE SEL5221S (ENTER/NEXT)	
D635	8-719-046-44	DIODE SEL5221S (EFFECT ON/OFF)	
D638	8-719-046-44	DIODE SEL5221S (NON-STOP)	
D639	8-719-046-44	DIODE SEL5221S (DSP DELAY)	
D640	8-719-046-44	DIODE SEL5221S (DSP REVERB)	
D641	8-719-046-44	DIODE SEL5221S (FF)	
D642	8-719-058-04	DIODE SEL5223S-TP15 (MULTI JOG STATION)	
< TRANSISTOR >			
Q531	8-729-900-80	TRANSISTOR DTC114ES	
Q532	8-729-900-80	TRANSISTOR DTC114ES	
Q533	8-729-900-80	TRANSISTOR DTC114ES	
Q534	8-729-900-80	TRANSISTOR DTC114ES	
Q535	8-729-900-80	TRANSISTOR DTC114ES	
Q538	8-729-900-80	TRANSISTOR DTC114ES	
Q539	8-729-900-80	TRANSISTOR DTC114ES	
Q540	8-729-900-80	TRANSISTOR DTC114ES	
< RESISTOR >			
R631	1-249-410-11	CARBON 270 5%	1/4W F
R632	1-249-407-11	CARBON 150 5%	1/4W F
R633	1-249-403-11	CARBON 68 5%	1/4W F
R634	1-249-407-11	CARBON 150 5%	1/4W F
R635	1-249-413-11	CARBON 470 5%	1/4W F
R638	1-249-413-11	CARBON 470 5%	1/4W F
R639	1-249-413-11	CARBON 470 5%	1/4W F
R640	1-249-413-11	CARBON 470 5%	1/4W F
R641	1-247-807-31	CARBON 100 5%	1/4W
R642	1-249-407-11	CARBON 150 5%	1/4W F
R643	1-249-409-11	CARBON 220 5%	1/4W F
R644	1-249-411-11	CARBON 330 5%	1/4W
R645	1-249-411-11	CARBON 330 5%	1/4W
R646	1-249-413-11	CARBON 470 5%	1/4W F
R647	1-249-415-11	CARBON 680 5%	1/4W F
R648	1-249-417-11	CARBON 1K 5%	1/4W F
R649	1-249-419-11	CARBON 1.5K 5%	1/4W F
R650	1-249-421-11	CARBON 2.2K 5%	1/4W F
R651	1-247-843-11	CARBON 3.3K 5%	1/4W
R652	1-249-417-11	CARBON 1K 5%	1/4W F
R653	1-247-807-31	CARBON 100 5%	1/4W
R654	1-249-407-11	CARBON 150 5%	1/4W F
R655	1-249-409-11	CARBON 220 5%	1/4W F
R656	1-249-411-11	CARBON 330 5%	1/4W
R657	1-249-411-11	CARBON 330 5%	1/4W
R658	1-249-413-11	CARBON 470 5%	1/4W F
R659	1-249-415-11	CARBON 680 5%	1/4W F
R660	1-249-429-11	CARBON 10K 5%	1/4W
R661	1-249-429-11	CARBON 10K 5%	1/4W
R662	1-249-429-11	CARBON 10K 5%	1/4W
R663	1-249-429-11	CARBON 10K 5%	1/4W
R665	1-247-843-11	CARBON 3.3K 5%	1/4W
R666	1-247-843-11	CARBON 3.3K 5%	1/4W
R671	1-247-807-31	CARBON 100 5%	1/4W
R672	1-247-807-31	CARBON 100 5%	1/4W

Ref. No.	Part No.	Description	Remarks
R673	1-247-807-31	CARBON 100 5%	1/4W
R674	1-247-807-31	CARBON 100 5%	1/4W
R675	1-247-807-31	CARBON 100 5%	1/4W
R678	1-247-807-31	CARBON 100 5%	1/4W
R679	1-247-807-31	CARBON 100 5%	1/4W
R680	1-247-807-31	CARBON 100 5%	1/4W
< SWITCH >			
S631	1-762-378-11	SWITCH, TACTILE (REW)	
S632	1-762-378-11	SWITCH, TACTILE (GAME)	
S633	1-762-378-11	SWITCH, TACTILE (MUSIC)	
S634	1-762-378-11	SWITCH, TACTILE (MOVIE)	
S635	1-762-378-11	SWITCH, TACTILE (DSP DELAY)	
S636	1-762-378-11	SWITCH, TACTILE (CD REPEAT)	
S637	1-762-378-11	SWITCH, TACTILE (FLASH)	
S638	1-762-378-11	SWITCH, TACTILE (DSP REVERB)	
S639	1-762-378-11	SWITCH, TACTILE (CD PLAY MODE)	
S640	1-762-378-11	SWITCH, TACTILE (CD EDIT)	
S641	1-762-378-11	SWITCH, TACTILE (NON-STOP)	
S642	1-762-378-11	SWITCH, TACTILE (DBFB)	
S643	1-762-378-11	SWITCH, TACTILE (ENTER/NEXT)	
S644	1-762-378-11	SWITCH, TACTILE (FF)	
S645	1-762-378-11	SWITCH, TACTILE (GROOVE)	
S648	1-762-378-11	SWITCH, TACTILE (EFFECT ON/OFF)	
S649	1-762-378-11	SWITCH, TACTILE (P FILE)	
S650	1-762-378-11	SWITCH, TACTILE (PLACE)	
S651	1-762-378-11	SWITCH, TACTILE (LOOP)	
S652	1-473-392-11	ENCODER, ROTARY (VOLUME)	
S653	1-467-968-11	ENCODER, ROTARY (MULTI JOG STATION)	

*	A-4414-215-A	MAIN BOARD, COMPLETE (EA, SP, MY, AUS)	

*	A-4414-225-A	MAIN BOARD, COMPLETE (AEP, UK, EE)	

*	A-4414-539-A	MAIN BOARD, COMPLETE (CIS)	

*	A-4414-771-A	MAIN BOARD, COMPLETE (TH)	

7-685-872-09	SCREW +BVTT 3×8 (S)		
< CAPACITOR >			
C101	1-162-286-31	CERAMIC 220PF 10% 50V	(AEP, UK, EE)
C102	1-162-286-31	CERAMIC 220PF 10% 50V	(AEP, UK, EE)
C103	1-126-963-11	ELECT 4.7uF 20% 50V	
C104	1-162-286-31	CERAMIC 220PF 10% 50V	(AEP, UK, EE)
C105	1-164-159-11	CERAMIC 0.1uF 50V	
C108	1-126-960-11	ELECT 1uF 20% 50V	
C111	1-136-171-00	FILM 0.33uF 5% 50V	
C112	1-136-161-00	FILM 0.047uF 5% 50V	
C113	1-164-159-11	CERAMIC 0.1uF 50V	
C114	1-130-480-00	MYLAR 0.0056uF 5% 50V	
C115	1-136-159-00	FILM 0.033uF 5% 50V	
C116	1-162-301-11	CERAMIC 0.0015uF 20% 16V	
C117	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C118	1-162-290-31	CERAMIC 470PF 10% 50V	
C119	1-162-600-11	CERAMIC 0.0047uF 30% 16V	

Ref. No.	Part No.	Description	Remarks			Ref. No.	Part No.	Description	Remarks		
C121	1-126-964-11	ELECT	10uF	20%	50V	C317	1-126-961-11	ELECT	2.2uF	20%	50V
C122	1-162-291-31	CERAMIC	560PF	10%	50V	C318	1-126-961-11	ELECT	2.2uF	20%	50V
C123	1-136-165-00	FILM	0.1uF	5%	50V	C319	1-104-664-11	ELECT	47uF	20%	25V
C124	1-136-165-00	FILM	0.1uF	5%	50V	C320	1-136-173-00	FILM	0.47uF	5%	50V
C125	1-164-159-11	CERAMIC	0.1uF		50V	C321	1-161-494-00	CERAMIC	0.022uF		25V
C126	1-126-964-11	ELECT	10uF	20%	50V	C322	1-136-161-00	FILM	0.047uF	5%	50V
C127	1-104-665-11	ELECT	100uF	20%	10V	C323	1-162-292-31	CERAMIC	680PF	10%	50V
C128	1-164-159-11	CERAMIC	0.1uF		50V	C324	1-126-934-11	ELECT	220uF	20%	10V
C129	1-126-964-11	ELECT	10uF	20%	50V	C325	1-136-164-00	FILM	0.082uF	5%	50V
C131	1-126-961-11	ELECT	2.2uF	20%	50V	C326	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C134	1-104-664-11	ELECT	47uF	20%	25V	C327	1-136-164-00	FILM	0.082uF	5%	50V
C135	1-126-959-11	ELECT	0.47uF	20%	50V	C328	1-126-959-11	ELECT	0.47uF	20%	50V
C151	1-162-286-31	CERAMIC	220PF	10%	50V	C329	1-124-252-00	ELECT	0.33uF	20%	50V
C152	1-162-286-31	CERAMIC	220PF	10%	50V	C330	1-126-961-11	ELECT	2.2uF	20%	50V
C153	1-126-963-11	ELECT	4.7uF	20%	50V	C331	1-136-165-00	FILM	0.1uF	5%	50V
C154	1-162-286-31	CERAMIC	220PF	10%	50V	C332	1-126-964-11	ELECT	10uF	20%	50V
C161	1-136-171-00	FILM	0.33uF	5%	50V	C333	1-126-961-11	ELECT	2.2uF	20%	50V
C162	1-136-161-00	FILM	0.047uF	5%	50V	C334	1-126-964-11	ELECT	10uF	20%	50V
C163	1-164-159-11	CERAMIC	0.1uF		50V	C335	1-136-165-00	FILM	0.1uF	5%	50V
C164	1-130-480-00	MYLAR	0.0056uF	5%	50V	C336	1-126-934-11	ELECT	220uF	20%	10V
C165	1-136-159-00	FILM	0.033uF	5%	50V	C337	1-126-964-11	ELECT	10uF	20%	50V
C166	1-162-301-11	CERAMIC	0.0015uF	20%	16V	C338	1-126-964-11	ELECT	10uF	20%	50V
C167	1-162-306-11	CERAMIC	0.01uF	20%	16V	C339	1-126-961-11	ELECT	2.2uF	20%	50V
C168	1-162-290-31	CERAMIC	470PF	10%	50V	C340	1-126-934-11	ELECT	220uF	20%	10V
C169	1-162-600-11	CERAMIC	0.0047uF	30%	16V	C341	1-126-961-11	ELECT	2.2uF	20%	50V
C171	1-126-964-11	ELECT	10uF	20%	50V	C342	1-126-934-11	ELECT	220uF	20%	10V
C172	1-162-291-31	CERAMIC	560PF	10%	50V	C343	1-126-934-11	ELECT	220uF	20%	10V
C173	1-136-165-00	FILM	0.1uF	5%	50V	C344	1-126-964-11	ELECT	10uF	20%	50V
C174	1-136-165-00	FILM	0.1uF	5%	50V	C345	1-126-964-11	ELECT	10uF	20%	50V
C175	1-136-495-11	FILM	0.068uF	5%	50V	C346	1-126-964-11	ELECT	10uF	20%	50V
C176	1-162-306-11	CERAMIC	0.01uF	20%	16V	C347	1-126-964-11	ELECT	10uF	20%	50V
C177	1-104-665-11	ELECT	100uF	20%	10V	C348	1-136-165-00	FILM	0.1uF	5%	50V
C178	1-164-159-11	CERAMIC	0.1uF		50V	C349	1-136-165-00	FILM	0.1uF	5%	50V
C181	1-126-961-11	ELECT	2.2uF	20%	50V	C350	1-164-159-11	CERAMIC	0.1uF		50V
C183	1-126-960-11	ELECT	1uF	20%	50V	C351	1-164-159-11	CERAMIC	0.1uF		50V
C184	1-162-303-11	CERAMIC	0.0033uF	30%	16V	C352	1-164-159-11	CERAMIC	0.1uF		50V
C186	1-162-292-31	CERAMIC	680PF	10%	50V	C353	1-126-960-11	ELECT	1uF	20%	50V
C187	1-126-961-11	ELECT	2.2uF	20%	50V	C354	1-126-960-11	ELECT	1uF	20%	50V
C188	1-126-960-11	ELECT	1uF	20%	50V	C355	1-162-210-31	CERAMIC	30PF	5%	50V
C301	1-126-959-11	ELECT	0.47uF	20%	50V	C356	1-162-210-31	CERAMIC	30PF	5%	50V
C302	1-126-963-11	ELECT	4.7uF	20%	50V	C357	1-164-159-11	CERAMIC	0.1uF		50V
C303	1-126-959-11	ELECT	0.47uF	20%	50V	C361	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-126-963-11	ELECT	4.7uF	20%	50V	C362	1-126-961-11	ELECT	2.2uF	20%	50V
C305	1-136-167-00	FILM	0.15uF	5%	50V	C363	1-104-664-11	ELECT	47uF	20%	25V
C306	1-126-962-11	ELECT	3.3uF	20%	50V	C364	1-164-159-11	CERAMIC	0.1uF		50V
C307	1-136-167-00	FILM	0.15uF	5%	50V	C371	1-162-282-31	CERAMIC	100PF	10%	50V
C308	1-136-167-00	FILM	0.15uF	5%	50V	C372	1-126-961-11	ELECT	2.2uF	20%	50V
C309	1-126-962-11	ELECT	3.3uF	20%	50V	C373	1-104-664-11	ELECT	47uF	20%	25V
C310	1-136-167-00	FILM	0.15uF	5%	50V	C374	1-164-159-11	CERAMIC	0.1uF		50V
C311	1-126-963-11	ELECT	4.7uF	20%	50V	C732	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-959-11	ELECT	0.47uF	20%	50V	C751	1-136-495-11	FILM	0.068uF	5%	50V
C313	1-126-963-11	ELECT	4.7uF	20%	50V	C761	1-136-495-11	FILM	0.068uF	5%	50V
C314	1-126-959-11	ELECT	0.47uF	20%	50V	C801	1-136-165-00	FILM	0.1uF	5%	50V
C315	1-136-165-00	FILM	0.1uF	5%	50V	C802	1-136-165-00	FILM	0.1uF	5%	50V
C316	1-136-165-00	FILM	0.1uF	5%	50V	C803	1-104-482-11	ELECT	4700uF	20%	63V

MAIN

Ref. No.	Part No.	Description	Remarks
C804	1-104-482-11	ELECT 4700uF 20%	63V
C805	1-126-948-11	ELECT 100uF 20%	35V
C806	1-126-964-11	ELECT 10uF 20%	50V
C807	1-136-165-00	FILM 0.1uF 5%	50V
C808	1-136-165-00	FILM 0.1uF 5%	50V
C809	1-126-943-11	ELECT 2200uF 20%	25V
C810	1-126-943-11	ELECT 2200uF 20%	25V
C815	1-126-940-11	ELECT 330uF 20%	25V
C816	1-126-942-61	ELECT 1000uF 20%	25V
C818	1-126-959-11	ELECT 0.47uF 20%	50V
C819	1-104-664-11	ELECT 47uF 20%	25V
C820	1-126-959-11	ELECT 0.47uF 20%	50V
C821	1-104-664-11	ELECT 47uF 20%	25V
C822	1-126-940-11	ELECT 330uF 20%	25V
C823	1-126-960-11	ELECT 1uF 20%	50V
C824	1-104-665-11	ELECT 100uF 20%	10V
C825	1-126-959-11	ELECT 0.47uF 20%	50V
C826	1-104-664-11	ELECT 47uF 20%	25V
C851	1-126-964-11	ELECT 10uF 20%	50V
C852	1-104-665-11	ELECT 100uF 20%	10V
C853	1-164-159-11	CERAMIC 0.1uF	50V
C854	1-126-961-11	ELECT 2.2uF 20%	50V
C855	1-126-934-11	ELECT 220uF 20%	10V
C856	1-104-665-11	ELECT 100uF 20%	10V
< CONNECTOR >			
* CN101	1-764-017-21	HOUSING,CONNECTOR(PC BOARD)17P	
CN103	1-774-289-11	PIN, CONNECTOR (PC BOARD) 15P	
* CN131	1-564-507-11	PLUG, CONNECTOR 4P	
CN301	1-691-765-21	PLUG (MICRO CONNECTOR) 3P	
CN701	1-778-311-11	SOCKET, CONNECTOR (PC BOARD) 30P	
* CN731	1-569-496-11	SOCKET, CONNECTOR 10P	
CN801	1-691-773-11	PLUG (MICRO CONNECTOR) 11P	
< DIODE >			
D101	8-719-911-19	DIODE 1SS119	
D102	8-719-911-19	DIODE 1SS119	
D131	8-719-911-19	DIODE 1SS119	
D742	8-719-024-99	DIODE 11ES2-NTA2B	
D743	8-719-911-19	DIODE 1SS119	
D746	8-719-911-19	DIODE 1SS119	
D751	8-719-911-19	DIODE 1SS119	
D752	8-719-911-19	DIODE 1SS119	
D761	8-719-911-19	DIODE 1SS119	
D781	8-719-024-99	DIODE 11ES2-NTA2B	
D801	8-719-302-38	DIODE RBV-602-01	
D802	8-719-911-19	DIODE 1SS119	
D803	8-719-911-19	DIODE 1SS119	
D804	8-719-934-22	DIODE HZS30-2L	
D805	8-719-024-99	DIODE 11ES2-NTA2B	
D806	8-719-024-99	DIODE 11ES2-NTA2B	
D807	8-719-024-99	DIODE 11ES2-NTA2B	
D808	8-719-024-99	DIODE 11ES2-NTA2B	
D810	8-719-024-99	DIODE 11ES2-NTA2B	
D811	8-719-024-99	DIODE 11ES2-NTA2B	
D812	8-719-911-19	DIODE 1SS119	
D813	8-719-024-99	DIODE 11ES2-NTA2B	
D821	8-719-024-99	DIODE 11ES2-NTA2B	
D851	8-719-911-19	DIODE 1SS119	
D852	8-719-911-19	DIODE 1SS119	
D853	8-719-911-19	DIODE 1SS119	

Ref. No.	Part No.	Description	Remarks
		< EARTH >	
* E801	1-537-738-21	TERMINAL, EARTH	
		< IC >	
IC111	8-759-495-24	IC M62442FP-TP	
IC112	8-759-000-48	IC MC14052BCP	
IC113	8-759-634-51	IC M5218AP	
IC300	8-759-526-39	IC LV1041M	
IC361	8-759-634-51	IC M5218AP	
IC801	8-759-604-86	IC M5F7807L	
IC802	8-759-604-90	IC M5F7907L	
IC803	8-759-231-53	IC TA7805S	
IC804	8-759-604-32	IC M5F7810	
IC851	8-759-111-68	IC UPC1237HA	
		< JACK >	
J101	1-580-825-11	JACK, PIN 6P (MD/VIDEO 1) (AEP, UK, EE, CIS)	
J101	1-770-613-11	JACK, PIN 4P (MD/VIDEO 1)	(EA, SP, MY, TH, AUS)
		< COIL >	
L131	1-410-521-11	INDUCTOR 100uH	
L751	1-420-872-00	COIL, AIR-CORE (AEP, UK, EE)	
L761	1-420-872-00	COIL, AIR-CORE (AEP, UK, EE)	
		< TRANSISTOR >	
Q121	8-729-422-57	TRANSISTOR UN4111	
Q132	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q182	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q183	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q361	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q371	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q731	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q732	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q741	8-729-111-29	TRANSISTOR 2SD1616A-K	
Q801	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q851	8-729-900-63	TRANSISTOR DTA124ES	
Q852	8-729-900-36	TRANSISTOR DTC124ES	
Q853	8-729-900-36	TRANSISTOR DTC124ES	
		< RESISTOR >	
R101	1-249-417-11	CARBON 1K 5% 1/4W F	(AEP, UK, EE, CIS)
R102	1-249-441-11	CARBON 100K 5% 1/4W	(AEP, UK, EE, CIS)
R103	1-249-417-11	CARBON 1K 5% 1/4W F	
R104	1-249-441-11	CARBON 100K 5% 1/4W	
R105	1-249-441-11	CARBON 100K 5% 1/4W	
R106	1-249-417-11	CARBON 1K 5% 1/4W F	
R108	1-249-417-11	CARBON 1K 5% 1/4W F	
R109	1-249-441-11	CARBON 100K 5% 1/4W	
R113	1-247-903-00	CARBON 1M 5% 1/4W	
R114	1-247-903-00	CARBON 1M 5% 1/4W	
R115	1-249-433-11	CARBON 22K 5% 1/4W	
R116	1-249-419-11	CARBON 1.5K 5% 1/4W F	
R117	1-247-895-00	CARBON 470K 5% 1/4W	
R119	1-249-441-11	CARBON 100K 5% 1/4W	
R120	1-249-441-11	CARBON 100K 5% 1/4W	

Ref. No.	Part No.	Description				Remarks	Ref. No.	Part No.	Description				Remarks
R121	1-249-417-11	CARBON	1K	5%	1/4W	F	R366	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R122	1-249-417-11	CARBON	1K	5%	1/4W	F	R367	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R123	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R371	1-249-417-11	CARBON	1K	5%	1/4W	F
R131	1-249-435-11	CARBON	33K	5%	1/4W		R372	1-249-441-11	CARBON	100K	5%	1/4W	
R132	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R373	1-249-429-11	CARBON	10K	5%	1/4W	
R134	1-249-435-11	CARBON	33K	5%	1/4W		R374	1-249-429-11	CARBON	10K	5%	1/4W	
R135	1-249-439-11	CARBON	68K	5%	1/4W		R375	1-249-437-11	CARBON	47K	5%	1/4W	
R136	1-247-883-00	CARBON	150K	5%	1/4W		R376	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R138	1-249-437-11	CARBON	47K	5%	1/4W		R377	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R139	1-247-903-00	CARBON	1M	5%	1/4W		R701	1-247-807-31	CARBON	100	5%	1/4W	
R140	1-249-441-11	CARBON	100K	5%	1/4W		R702	1-247-807-31	CARBON	100	5%	1/4W	
R141	1-249-417-11	CARBON	1K	5%	1/4W	F	R703	1-247-807-31	CARBON	100	5%	1/4W	
R142	1-249-437-11	CARBON	47K	5%	1/4W		R704	1-247-807-31	CARBON	100	5%	1/4W	(AEP, UK, EE)
R145	1-247-887-00	CARBON	220K	5%	1/4W								(AEP, UK, EE)
R151	1-249-417-11	CARBON	1K	5%	1/4W	F	R705	1-247-807-31	CARBON	100	5%	1/4W	
R152	1-249-441-11	CARBON	100K	5%	1/4W	(AEP, UK, EE, CIS)	R706	1-247-807-31	CARBON	100	5%	1/4W	
							R707	1-247-807-31	CARBON	100	5%	1/4W	
R153	1-249-417-11	CARBON	1K	5%	1/4W	F	R708	1-247-807-31	CARBON	100	5%	1/4W	
R154	1-249-441-11	CARBON	100K	5%	1/4W		R709	1-247-807-31	CARBON	100	5%	1/4W	
R155	1-249-441-11	CARBON	100K	5%	1/4W		R710	1-247-807-31	CARBON	100	5%	1/4W	
R156	1-249-417-11	CARBON	1K	5%	1/4W	F	R711	1-247-807-31	CARBON	100	5%	1/4W	
R158	1-249-417-11	CARBON	1K	5%	1/4W	F	R712	1-247-807-31	CARBON	100	5%	1/4W	
R159	1-249-441-11	CARBON	100K	5%	1/4W		R713	1-247-807-31	CARBON	100	5%	1/4W	
R163	1-247-903-00	CARBON	1M	5%	1/4W		R714	1-247-807-31	CARBON	100	5%	1/4W	
R164	1-247-903-00	CARBON	1M	5%	1/4W		R715	1-247-807-31	CARBON	100	5%	1/4W	
R165	1-249-433-11	CARBON	22K	5%	1/4W		R716	1-247-807-31	CARBON	100	5%	1/4W	
R166	1-249-419-11	CARBON	1.5K	5%	1/4W	F	R717	1-247-807-31	CARBON	100	5%	1/4W	
R167	1-247-895-00	CARBON	470K	5%	1/4W		R718	1-247-807-31	CARBON	100	5%	1/4W	
R172	1-249-429-11	CARBON	10K	5%	1/4W		R731	1-249-429-11	CARBON	10K	5%	1/4W	
R173	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R732	1-249-429-11	CARBON	10K	5%	1/4W	
R181	1-249-435-11	CARBON	33K	5%	1/4W		R733	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R182	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R742	1-249-439-11	CARBON	68K	5%	1/4W	
R184	1-249-435-11	CARBON	33K	5%	1/4W		R743	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R185	1-249-439-11	CARBON	68K	5%	1/4W		R744	1-249-437-11	CARBON	47K	5%	1/4W	
R186	1-247-883-00	CARBON	150K	5%	1/4W		△ R745	1-216-457-00	METAL OXIDE	1.2K	5%	2W	F
R188	1-249-437-11	CARBON	47K	5%	1/4W		R746	1-249-432-11	CARBON	18K	5%	1/4W	
R189	1-249-429-11	CARBON	10K	5%	1/4W		R747	1-249-437-11	CARBON	47K	5%	1/4W	
R190	1-247-895-00	CARBON	470K	5%	1/4W		R751	1-249-432-11	CARBON	18K	5%	1/4W	
R191	1-249-417-11	CARBON	1K	5%	1/4W	F	R752	1-249-439-11	CARBON	68K	5%	1/4W	
R192	1-249-437-11	CARBON	47K	5%	1/4W		R753	1-249-397-11	CARBON	22	5%	1/4W	F
R193	1-249-441-11	CARBON	100K	5%	1/4W		R754	1-249-397-11	CARBON	22	5%	1/4W	(AEP, UK, EE)
R194	1-249-417-11	CARBON	1K	5%	1/4W	F							(AEP, UK, EE)
R195	1-249-417-11	CARBON	1K	5%	1/4W	F	R755	1-249-397-11	CARBON	22	5%	1/4W	F
R196	1-249-429-11	CARBON	10K	5%	1/4W								(AEP, UK, EE)
R304	1-249-436-11	CARBON	39K	5%	1/4W		R756	1-249-397-11	CARBON	22	5%	1/4W	F
R305	1-249-433-11	CARBON	22K	5%	1/4W								(AEP, UK, EE)
R306	1-249-433-11	CARBON	22K	5%	1/4W		R757	1-249-435-11	CARBON	33K	5%	1/4W	
R307	1-249-433-11	CARBON	22K	5%	1/4W		△ R758	1-216-457-00	METAL OXIDE	1.2K	5%	2W	F
R308	1-249-433-11	CARBON	22K	5%	1/4W		△ R758	1-215-869-11	METAL OXIDE	1K	5%	1W	(EA, SP, MY, TH, AUS)
R310	1-247-903-00	CARBON	1M	5%	1/4W								(AEP, UK, EE, CIS)
R340	1-247-843-11	CARBON	3.3K	5%	1/4W		R761	1-249-432-11	CARBON	18K	5%	1/4W	
R361	1-249-417-11	CARBON	1K	5%	1/4W	F	R762	1-249-437-11	CARBON	47K	5%	1/4W	
R362	1-249-441-11	CARBON	100K	5%	1/4W		R763	1-249-397-11	CARBON	22	5%	1/4W	F
R363	1-249-429-11	CARBON	10K	5%	1/4W		R764	1-249-397-11	CARBON	22	5%	1/4W	(AEP, UK, EE)
R364	1-249-429-11	CARBON	10K	5%	1/4W								(AEP, UK, EE)
R365	1-249-437-11	CARBON	47K	5%	1/4W		R765	1-249-397-11	CARBON	22	5%	1/4W	F

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

MAIN

MIC

MOTOR

Ref. No.	Part No.	Description	Remarks		
R766	1-249-397-11	CARBON	22	5%	1/4W F (AEP, UK, EE)
R767	1-249-435-11	CARBON	33K	5%	1/4W
R781	1-260-100-11	CARBON	1.2K	5%	1/2W
R782	1-260-100-11	CARBON	1.2K	5%	1/2W
R783	1-260-100-11	CARBON	1.2K	5%	1/2W
R784	1-260-100-11	CARBON	1.2K	5%	1/2W
R801	1-249-431-11	CARBON	15K	5%	1/4W
R802	1-249-431-11	CARBON	15K	5%	1/4W
R803	1-249-429-11	CARBON	10K	5%	1/4W
△ R804	1-212-982-00	FUSIBLE	100	5%	1/2W F
R851	1-249-431-11	CARBON	15K	5%	1/4W
R852	1-249-435-11	CARBON	33K	5%	1/4W
R853	1-249-429-11	CARBON	10K	5%	1/4W
R854	1-249-397-11	CARBON	22	5%	1/4W F
R855	1-249-441-11	CARBON	100K	5%	1/4W
R856	1-249-429-11	CARBON	10K	5%	1/4W
< RELAY >					
RY741	1-515-920-11	RELAY (24V)			
RY751	1-515-920-11	RELAY (24V)			
< TERMINAL >					
TB751	1-537-240-31	TERMINAL BOARD(CHECKER PIN)	(FRONT SPEAKER)		
< VIBRATOR >					
X301	1-579-952-21	VIBRATOR, CERAMIC	8MHz		

*	A-4414-202-A	MIC/ECHO BOARD, COMPLETE (EXCEPT TH)	*****		
*	A-4414-778-A	MIC/ECHO BOARD, COMPLETE (TH)	*****		
< CAPACITOR >					
C6001	1-162-306-11	CERAMIC	0.01uF	20%	16V
C6002	1-124-257-00	ELECT	2.2uF	20%	50V
C6004	1-124-257-00	ELECT	2.2uF	20%	50V
C6005	1-162-294-31	CERAMIC	0.001uF	10%	50V
C6006	1-162-215-31	CERAMIC	47PF	5%	50V
C6007	1-162-290-31	CERAMIC	470PF	10%	50V
C6008	1-126-157-11	ELECT	10uF	20%	16V
C6009	1-124-465-00	ELECT	0.47uF	20%	50V
C6010	1-162-215-31	CERAMIC	47PF	5%	50V
C6011	1-162-282-31	CERAMIC	100PF	10%	50V
C6012	1-126-157-11	ELECT	10uF	20%	16V
C6014	1-124-257-00	ELECT	2.2uF	20%	50V
C6031	1-162-306-11	CERAMIC	0.01uF	20%	16V
< CONNECTOR >					
CN6001	1-506-469-11	PIN, CONNECTOR	4P		
< EARTH >					
* E6001	1-537-738-21	TERMINAL, EARTH			

Ref. No.	Part No.	Description	Remarks		
< IC >					
IC6001	8-759-634-51	IC M5218AP			
< JACK >					
J6001	1-770-226-11	JACK (LARGE TYPE) (MIC)			
< RESISTOR >					
R6001	1-249-429-11	CARBON	10K	5%	1/4W
R6002	1-249-417-11	CARBON	1K	5%	1/4W F
R6005	1-249-441-11	CARBON	100K	5%	1/4W
R6006	1-249-417-11	CARBON	1K	5%	1/4W F
R6007	1-249-433-11	CARBON	22K	5%	1/4W
R6008	1-249-429-11	CARBON	10K	5%	1/4W
R6009	1-247-885-00	CARBON	180K	5%	1/4W
R6010	1-247-807-31	CARBON	100	5%	1/4W
< VARIABLE RESISTOR >					
RV6001	1-225-410-11	RES, VAR, CARBON 50K (MIC LEVEL)			

*	1-669-965-11	MOTOR BOARD			

< CAPACITOR >					
C891	1-162-306-11	CERAMIC	0.01uF	20%	16V
C892	1-124-478-11	ELECT	100uF	20%	25V
C893	1-164-159-11	CERAMIC	0.1uF		50V
< CONNECTOR >					
* CN892	1-568-941-11	PIN, CONNECTOR 3P			
< DIODE >					
D891	8-719-947-16	DIODE MTZJ-T-72-5.1A			
< IC >					
IC891	8-759-822-09	IC LB1641			
< MOTOR >					
M891	A-4660-926-A	MOTOR (CDM) ASSY			
< RESISTOR >					
R891	1-249-425-11	CARBON	4.7K	5%	1/4W F
R892	1-249-425-11	CARBON	4.7K	5%	1/4W F
R893	1-249-429-11	CARBON	10K	5%	1/4W
R894	1-249-413-11	CARBON	470	5%	1/4W F

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	A-4414-223-A	PANEL BOARD, COMPLETE (SP, MY) *****				< CONNECTOR >	
*	A-4414-229-A	PANEL BOARD, COMPLETE (AEP, UK, EE) *****		* CN501	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
*	A-4414-536-A	PANEL BOARD, COMPLETE (AUS) *****		CN502	1-778-312-11	PLUG, CONNECTOR (PC BOARD) 30P	
*	A-4414-541-A	PANEL BOARD, COMPLETE (CIS) *****		CN503	1-691-650-11	SOCKET, CONNECTOR 19P	
*	A-4414-786-A	PANEL BOARD, COMPLETE (TH) *****		* CN504	1-565-835-11	SOCKET, CONNECTOR 3P	
*	A-4417-305-A	PANEL BOARD, COMPLETE (EA) *****				< DIODE >	
*	4-900-849-01	HOLDER (FL)		D501	8-719-024-99	DIODE 11ES2-NTA2B	
*	4-932-810-11	CUSHION (FL)		D502	8-719-911-19	DIODE 1SS119	
		< CAPACITOR >		D504	8-719-911-19	DIODE 1SS119	
C501	1-162-205-31	CERAMIC 18PF 5% 50V		D505	8-719-911-19	DIODE 1SS119	
C502	1-162-205-31	CERAMIC 18PF 5% 50V		D506	8-719-911-19	DIODE 1SS119	
C503	1-104-905-11	CAPACITOR 0.22F 5.5V					
C505	1-164-159-11	CERAMIC 0.1uF 50V		D507	8-719-911-19	DIODE 1SS119	
C506	1-164-159-11	CERAMIC 0.1uF 50V		D509	8-719-024-99	DIODE 11ES2-NTA2B	
		(EXCEPT TH)		D511	8-719-118-62	DIODE RD5.6F-T7B1	
C507	1-164-159-11	CERAMIC 0.1uF 50V		D512	8-719-046-80	DIODE SML19416W-TP4 (MOVIE)	
C508	1-164-159-11	CERAMIC 0.1uF 50V		D513	8-719-046-80	DIODE SML19416W-TP4 (MOVIE)	
C509	1-124-589-11	ELECT 47uF 20% 16V		D514	8-719-046-80	DIODE SML19416W-TP4 (MUSIC)	
C510	1-162-306-11	CERAMIC 0.01uF 20% 16V		D515	8-719-046-80	DIODE SML19416W-TP4 (MUSIC)	
C513	1-162-284-31	CERAMIC 150PF 10% 50V		D516	8-719-046-80	DIODE SML19416W-TP4 (GAME)	
C514	1-162-284-31	CERAMIC 150PF 10% 50V		D517	8-719-046-80	DIODE SML19416W-TP4 (GAME)	
C517	1-162-303-11	CERAMIC 0.0033uF 30% 16V		D518	8-719-046-80	DIODE SML19416W-TP4 (PLACE)	
C518	1-126-157-11	ELECT 10uF 20% 16V		D519	8-719-046-80	DIODE SML19416W-TP4 (PLACE)	
C519	1-126-157-11	ELECT 10uF 20% 16V		D520	8-719-046-80	DIODE SML19416W-TP4 (P-FILE)	
C520	1-126-157-11	ELECT 10uF 20% 16V		D521	8-719-046-80	DIODE SML19416W-TP4 (P-FILE)	
				D522	8-719-046-44	DIODE SEL5221S (AUTO)	
C521	1-162-306-11	CERAMIC 0.01uF 20% 16V				< FILTER >	
C522	1-126-157-11	ELECT 10uF 20% 16V		FL601	1-517-775-11	INDICATOR TUBE, FLUORESCENT	
C523	1-126-157-11	ELECT 10uF 20% 16V				< IC >	
C601	1-126-157-11	ELECT 10uF 20% 16V		IC501	8-759-563-01	IC uPD780016AYGF020-3BA	
C602	1-162-306-11	CERAMIC 0.01uF 20% 16V		IC502	8-759-165-82	IC PST600E-T	
				IC503	8-749-011-22	IC GP1U27X	
C603	1-162-294-31	CERAMIC 0.001uF 10% 50V		IC504	8-719-070-85	DIODE KU381-40	
C604	1-162-294-31	CERAMIC 0.001uF 10% 50V		IC505	8-759-140-53	IC UPD4053BC	
C605	1-126-157-11	ELECT 10uF 20% 16V		IC506	8-759-495-25	IC BA3833F-E2	
C606	1-124-261-00	ELECT 10uF 20% 50V		IC601	8-759-261-63	IC M66004M6FP	
C607	1-124-261-00	ELECT 10uF 20% 50V				< COIL >	
C608	1-124-589-11	ELECT 47uF 20% 16V		L501	1-408-074-00	INDUCTOR 56uH	
C609	1-162-282-31	CERAMIC 100PF 10% 50V		L502	1-410-521-11	INDUCTOR 100uH	
C610	1-162-288-31	CERAMIC 330PF 10% 50V				< TRANSISTOR >	
C611	1-162-288-31	CERAMIC 330PF 10% 50V		Q501	8-729-620-05	TRANSISTOR 2SC2603-EF	
C612	1-162-288-31	CERAMIC 330PF 10% 50V		Q502	8-729-422-57	TRANSISTOR UN4111	
C613	1-162-288-31	CERAMIC 330PF 10% 50V		Q503	8-729-422-57	TRANSISTOR UN4111	
C614	1-162-288-31	CERAMIC 330PF 10% 50V		Q504	8-729-422-57	TRANSISTOR UN4111	
C615	1-162-288-31	CERAMIC 330PF 10% 50V		Q505	8-729-422-57	TRANSISTOR UN4111	
C616	1-162-288-31	CERAMIC 330PF 10% 50V					
C617	1-162-288-31	CERAMIC 330PF 10% 50V		Q506	8-729-422-57	TRANSISTOR UN4111	
C618	1-162-288-31	CERAMIC 330PF 10% 50V		Q507	8-729-422-57	TRANSISTOR UN4111	
C619	1-162-288-31	CERAMIC 330PF 10% 50V		Q508	8-729-422-57	TRANSISTOR UN4111	
C620	1-162-288-31	CERAMIC 330PF 10% 50V		Q509	8-729-422-57	TRANSISTOR UN4111	
C621	1-162-288-31	CERAMIC 330PF 10% 50V		Q510	8-729-422-57	TRANSISTOR UN4111	
C622	1-162-288-31	CERAMIC 330PF 10% 50V					
C623	1-162-288-31	CERAMIC 330PF 10% 50V		Q511	8-729-422-57	TRANSISTOR UN4111	
C624	1-162-288-31	CERAMIC 330PF 10% 50V		Q512	8-729-900-80	TRANSISTOR DTC114ES	
C625	1-162-288-31	CERAMIC 330PF 10% 50V		Q513	8-729-900-80	TRANSISTOR DTC114ES	

PANEL

Ref. No.	Part No.	Description	Remarks		
		< RESISTOR >			
R501	1-247-891-00	CARBON	330K	5%	1/4W
R502	1-249-433-11	CARBON	22K	5%	1/4W
R503	1-249-437-11	CARBON	47K	5%	1/4W
R504	1-249-437-11	CARBON	47K	5%	1/4W
R505	1-249-429-11	CARBON	10K	5%	1/4W
R506	1-249-429-11	CARBON	10K	5%	1/4W
R507	1-249-441-11	CARBON	100K	5%	1/4W
R511	1-249-429-11	CARBON	10K	5%	1/4W
R512	1-249-429-11	CARBON	10K	5%	1/4W
			(AEP, UK, EE, CIS, TH)		
R513	1-249-429-11	CARBON	10K	5%	1/4W
			(CIS)		
R514	1-249-429-11	CARBON	10K	5%	1/4W
			(EA)		
R515	1-249-429-11	CARBON	10K	5%	1/4W
			(AEP,UK,EE,CIS,AUS)		
R516	1-249-427-11	CARBON	6.8K	5%	1/4W F
R517	1-249-427-11	CARBON	6.8K	5%	1/4W F
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-247-807-31	CARBON	100	5%	1/4W
R520	1-247-807-31	CARBON	100	5%	1/4W
R521	1-247-807-31	CARBON	100	5%	1/4W
R522	1-247-807-31	CARBON	100	5%	1/4W
R523	1-247-807-31	CARBON	100	5%	1/4W
R524	1-247-807-31	CARBON	100	5%	1/4W
R525	1-247-807-31	CARBON	100	5%	1/4W
R526	1-247-807-31	CARBON	100	5%	1/4W
R527	1-247-807-31	CARBON	100	5%	1/4W
R528	1-247-807-31	CARBON	100	5%	1/4W
R529	1-247-807-31	CARBON	100	5%	1/4W
R530	1-247-807-31	CARBON	100	5%	1/4W
R531	1-247-807-31	CARBON	100	5%	1/4W
R532	1-247-807-31	CARBON	100	5%	1/4W
R533	1-247-807-31	CARBON	100	5%	1/4W
R534	1-247-807-31	CARBON	100	5%	1/4W
R535	1-247-807-31	CARBON	100	5%	1/4W
R536	1-247-807-31	CARBON	100	5%	1/4W
R537	1-247-807-31	CARBON	100	5%	1/4W
R538	1-247-807-31	CARBON	100	5%	1/4W
R539	1-247-807-31	CARBON	100	5%	1/4W
R540	1-247-807-31	CARBON	100	5%	1/4W
R541	1-247-807-31	CARBON	100	5%	1/4W
R542	1-247-807-31	CARBON	100	5%	1/4W
R543	1-247-807-31	CARBON	100	5%	1/4W
R544	1-247-807-31	CARBON	100	5%	1/4W
R546	1-249-441-11	CARBON	100K	5%	1/4W
R547	1-247-881-00	CARBON	120K	5%	1/4W
R548	1-249-433-11	CARBON	22K	5%	1/4W
R549	1-249-429-11	CARBON	10K	5%	1/4W
R550	1-249-409-11	CARBON	220	5%	1/4W F
R551	1-249-409-11	CARBON	220	5%	1/4W F
R552	1-247-807-31	CARBON	100	5%	1/4W
R553	1-247-807-31	CARBON	100	5%	1/4W
R554	1-247-807-31	CARBON	100	5%	1/4W
R555	1-247-807-31	CARBON	100	5%	1/4W
R556	1-247-807-31	CARBON	100	5%	1/4W
R557	1-247-807-31	CARBON	100	5%	1/4W
R558	1-247-807-31	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description	Remarks		
R559	1-247-807-31	CARBON	100	5%	1/4W
R560	1-247-807-31	CARBON	100	5%	1/4W
R561	1-247-807-31	CARBON	100	5%	1/4W
R562	1-247-807-31	CARBON	100	5%	1/4W
R563	1-247-807-31	CARBON	100	5%	1/4W
R564	1-247-807-31	CARBON	100	5%	1/4W
R565	1-247-807-31	CARBON	100	5%	1/4W
R566	1-247-807-31	CARBON	100	5%	1/4W
R567	1-247-807-31	CARBON	100	5%	1/4W
R568	1-247-807-31	CARBON	100	5%	1/4W
R569	1-249-407-11	CARBON	150	5%	1/4W F
R570	1-249-409-11	CARBON	220	5%	1/4W F
R571	1-249-411-11	CARBON	330	5%	1/4W
R572	1-249-411-11	CARBON	330	5%	1/4W
R573	1-249-413-11	CARBON	470	5%	1/4W F
R574	1-249-415-11	CARBON	680	5%	1/4W F
R575	1-249-417-11	CARBON	1K	5%	1/4W F
R576	1-249-419-11	CARBON	1.5K	5%	1/4W F
R577	1-249-421-11	CARBON	2.2K	5%	1/4W F
R578	1-247-843-11	CARBON	3.3K	5%	1/4W
R579	1-249-425-11	CARBON	4.7K	5%	1/4W F
R580	1-249-429-11	CARBON	10K	5%	1/4W
R581	1-249-433-11	CARBON	22K	5%	1/4W
R582	1-249-439-11	CARBON	68K	5%	1/4W
R583	1-247-807-31	CARBON	100	5%	1/4W
R584	1-249-407-11	CARBON	150	5%	1/4W F
R585	1-249-409-11	CARBON	220	5%	1/4W F
R586	1-249-411-11	CARBON	330	5%	1/4W
R587	1-249-411-11	CARBON	330	5%	1/4W
R588	1-249-413-11	CARBON	470	5%	1/4W F
R589	1-249-415-11	CARBON	680	5%	1/4W F
R590	1-249-417-11	CARBON	1K	5%	1/4W F
R591	1-249-419-11	CARBON	1.5K	5%	1/4W F
R592	1-249-421-11	CARBON	2.2K	5%	1/4W F
R593	1-247-843-11	CARBON	3.3K	5%	1/4W
R594	1-249-425-11	CARBON	4.7K	5%	1/4W F
R595	1-249-429-11	CARBON	10K	5%	1/4W
R596	1-249-433-11	CARBON	22K	5%	1/4W
R597	1-249-403-11	CARBON	68	5%	1/4W F
R598	1-249-403-11	CARBON	68	5%	1/4W F
R599	1-249-403-11	CARBON	68	5%	1/4W F
R600	1-249-403-11	CARBON	68	5%	1/4W F
R601	1-249-403-11	CARBON	68	5%	1/4W F
R602	1-249-403-11	CARBON	68	5%	1/4W F
R603	1-249-403-11	CARBON	68	5%	1/4W F
R604	1-249-403-11	CARBON	68	5%	1/4W F
R605	1-249-403-11	CARBON	68	5%	1/4W F
R606	1-249-403-11	CARBON	68	5%	1/4W F
R607	1-249-415-11	CARBON	680	5%	1/4W F
R608	1-247-807-31	CARBON	100	5%	1/4W
R614	1-249-434-11	CARBON	27K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-429-11	CARBON	10K	5%	1/4W
R617	1-249-417-11	CARBON	1K	5%	1/4W F
R618	1-247-843-11	CARBON	3.3K	5%	1/4W
R619	1-249-437-11	CARBON	47K	5%	1/4W
R621	1-247-843-11	CARBON	3.3K	5%	1/4W
R622	1-247-843-11	CARBON	3.3K	5%	1/4W
R623	1-249-425-11	CARBON	4.7K	5%	1/4W F

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< SWITCH >					
S501	1-762-378-11	SWITCH, TACTILE (EQ 16kHz +)		C907	1-136-495-11	FILM 0.068uF 5%	50V
S502	1-762-378-11	SWITCH, TACTILE (NAME IN)		C932	1-128-552-51	ELECT 47uF 20%	63V
S503	1-762-378-11	SWITCH, TACTILE (CHAR)		C933	1-128-581-11	ELECT 4.7uF 20%	63V
S504	1-762-378-11	SWITCH, TACTILE (EQ MEMORY)		C934	1-128-552-51	ELECT 47uF 20%	63V
S505	1-762-378-11	SWITCH, TACTILE (OPEN/CLOSE)		C936	1-162-282-31	CERAMIC 100PF 10%	50V (EXCEPT TH)
S506	1-762-378-11	SWITCH, TACTILE (TUNER BAND)		C937	1-126-965-11	ELECT 22uF 20%	50V
S507	1-762-378-11	SWITCH, TACTILE (STEREO/MONO)		C938	1-126-934-11	ELECT 220uF 20%	16V
S508	1-762-378-11	SWITCH, TACTILE (MEMORY)		C940	1-128-581-11	ELECT 4.7uF 20%	63V
S509	1-762-378-11	SWITCH, TACTILE (KARAOKE PONMPX)		C950	1-162-306-11	CERAMIC 0.01uF 20%	16V (TH)
S510	1-762-378-11	SWITCH, TACTILE (OPEN SENSOR ON/OFF)		C951	1-126-963-11	ELECT 4.7uF 20%	50V
S511	1-762-378-11	SWITCH, TACTILE (INSERT)		C952	1-162-294-31	CERAMIC 0.001uF 10%	50V
S512	1-762-378-11	SWITCH, TACTILE (DELETE)		C953	1-162-282-31	CERAMIC 100PF 10%	50V
S513	1-762-378-11	SWITCH, TACTILE (EQ 16kHz -)		C954	1-126-967-11	ELECT 47uF 20%	50V
S514	1-762-378-11	SWITCH, TACTILE (FUNCTION)		C955	1-126-967-11	ELECT 47uF 20%	50V
S515	1-762-378-11	SWITCH, TACTILE (TIMER SELECT)		C956	1-136-495-11	FILM 0.068uF 5%	50V
S516	1-762-378-11	SWITCH, TACTILE (CLOCK/TIMER SELECT)		C957	1-136-495-11	FILM 0.068uF 5%	50V
S517	1-762-378-11	SWITCH, TACTILE (POWER)				< CONNECTOR >	
S518	1-762-378-11	SWITCH, TACTILE (DIPLAY)		CN902	1-691-770-11	PLUG (MICRO CONNECTOR) 8P	
S519	1-762-378-11	SWITCH, TACTILE (PTY) (AEP, UK, EE)		CN904	1-691-161-11	PIN, CONNECTOR 4P	
S520	1-762-378-11	SWITCH, TACTILE (SURROUND +)				< DIODE >	
S521	1-762-378-11	SWITCH, TACTILE (SURROUND -)		D809	8-719-028-23	DIODE D3SBA20-4101	
S522	1-762-378-11	SWITCH, TACTILE (DBFB -)		D903	8-719-911-19	DIODE 1SS119	
S523	1-762-378-11	SWITCH, TACTILE (DBFB +)		D941	8-719-911-19	DIODE 1SS119 (EA, CIS, SP, MY, AUS)	
S524	1-762-378-11	SWITCH, TACTILE (EQ 63Hz +)		D953	8-719-911-19	DIODE 1SS119	
S525	1-762-378-11	SWITCH, TACTILE (EQ 63Hz -)				< IC >	
S526	1-762-378-11	SWITCH, TACTILE (EQ 250Hz -)		IC901	8-749-921-04	IC STK-4211MK-2 (AEP,UK,EE)	
S527	1-762-378-11	SWITCH, TACTILE (EQ 250Hz +)		IC901	8-749-921-68	IC STK-4231MK2 (EA,CIS,SP,MY,AUS)	
S528	1-762-378-11	SWITCH, TACTILE (EQ 1kHz +)		IC901	8-749-922-65	IC STK-4221MK2 (TH)	
S529	1-762-378-11	SWITCH, TACTILE (EQ 1kHz -)				< TRANSISTOR >	
S530	1-762-378-11	SWITCH, TACTILE (EQ 4kHz -)		Q131	8-729-141-30	TRANSISTOR 2SC3623A-LK	
S531	1-762-378-11	SWITCH, TACTILE (EQ 4kHz +)		Q181	8-729-141-30	TRANSISTOR 2SC3623A-LK	
		< VIBRATOR >		Q901	8-729-900-36	TRANSISTOR DTC124ES	
X501	1-760-489-11	VIBRATOR, CERAMIC 5MHz		Q902	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
X502	1-567-098-41	VIBRATOR, CRYSTAL 32kHz		Q952	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
*****				Q971	8-729-900-36	TRANSISTOR DTC124ES	
*	A-4414-221-A	POWER AMP BOARD, COMPLETE		Q972	8-729-119-78	TRANSISTOR 2SC403SP-51	
		*****				< RESISTOR >	
		(EA, CIS, SP, MY, AUS)		R133	1-249-425-11	CARBON 4.7K 5%	1/4W F
*	A-4414-228-A	POWER AMP BOARD, COMPLETE (AEP, UK, EE)		R183	1-249-425-11	CARBON 4.7K 5%	1/4W F
		*****		R901	1-249-417-11	CARBON 1K 5%	1/4W F
		(AEP, UK, EE)		R902	1-249-437-11	CARBON 47K 5%	1/4W
*	A-4414-784-A	POWER AMP BOARD, COMPLETE (TH)		R903	1-249-412-11	CARBON 390 5%	1/4W F (AEP, UK, EE, TH)
		*****		R903	1-249-413-11	CARBON 470 5%	1/4W F (EA, CIS, SP, MY, AUS)
		< CAPACITOR >		R904	1-249-437-11	CARBON 47K 5%	1/4W
C811	1-136-165-00	FILM 0.1uF 5%	50V	R906	1-249-429-11	CARBON 10K 5%	1/4W
C812	1-136-165-00	FILM 0.1uF 5%	50V	R907	1-249-429-11	CARBON 10K 5%	1/4W
C813	1-126-974-11	ELECT 3300uF 20%	50V	R908	1-249-429-11	CARBON 10K 5%	1/4W
C814	1-126-974-11	ELECT 3300uF 20%	50V				
C901	1-126-963-11	ELECT 4.7uF 20%	50V				
C902	1-162-294-31	CERAMIC 0.001uF 10%	50V				
C903	1-162-282-31	CERAMIC 100PF 10%	50V				
C904	1-126-967-11	ELECT 47uF 20%	50V				
C905	1-126-967-11	ELECT 47uF 20%	50V				
C906	1-136-495-11	FILM 0.068uF 5%	50V				

POWER AMP

PRIMARY

SECONDARY

SURR AMP

The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description				Remarks	Ref. No.	Part No.	Description				Remarks
		< IC >							< CONNECTOR >				
IC4001	8-749-900-96	IC STK-4142MK2					* CN201	1-569-505-11	PIN, CONNECTOR 10P				
		< TRANSISTOR >					CN202	1-564-506-11	PLUG, CONNECTOR 3P				
							CN781	1-506-468-11	PIN, CONNECTOR 3P				
Q4002	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA							< DIODE >				
Q4052	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA					D201	8-719-024-99	DIODE 11ES2-NTA2B				
		< RESISTOR >					D782	8-719-911-19	DIODE 1SS119				
									< EARTH >				
R4001	1-249-417-11	CARBON 1K 5% 1/4W F											
R4002	1-249-437-11	CARBON 47K 5% 1/4W											
R4003	1-249-413-11	CARBON 470 5% 1/4W F					* E781	4-870-539-11	PLATE, GROUND				
R4004	1-249-437-11	CARBON 47K 5% 1/4W							< JACK >				
R4006	1-249-425-11	CARBON 4.7K 5% 1/4W F											
							J781	1-785-011-11	JACK, PIN 2P				
R4007	1-249-425-11	CARBON 4.7K 5% 1/4W F							< COIL >				
R4008	1-249-425-11	CARBON 4.7K 5% 1/4W F											
R4009	1-249-425-11	CARBON 4.7K 5% 1/4W F											
R4010	1-249-397-11	CARBON 22 5% 1/4W F					L201	1-420-872-00	COIL, AIR-CORE (AEP, UK, EE)				
R4011	1-249-397-11	CARBON 22 5% 1/4W F					L221	1-420-872-00	COIL, AIR-CORE (AEP, UK, EE)				
									< RESISTOR >				
R4013	1-249-417-11	CARBON 1K 5% 1/4W F											
R4014	1-249-431-11	CARBON 15K 5% 1/4W											
R4015	1-249-441-11	CARBON 100K 5% 1/4W											
△ R4020	1-220-755-11	METAL 0.22 10% 2W					R201	1-249-397-11	CARBON 22 5% 1/4W F				
△ R4021	1-217-641-00	FUSIBLE 4.7 5% 1/4W F											(AEP, UK, EE)
							R202	1-249-397-11	CARBON 22 5% 1/4W F				
△ R4032	1-212-881-11	FUSIBLE 100 5% 1/4W F											(AEP, UK, EE)
R4033	1-249-421-11	CARBON 2.2K 5% 1/4W F					R203	1-249-393-11	CARBON 10 5% 1/4W F				
R4034	1-249-421-11	CARBON 2.2K 5% 1/4W F											(AEP, UK, EE)
R4035	1-249-421-11	CARBON 2.2K 5% 1/4W F					R221	1-249-397-11	CARBON 22 5% 1/4W F				
R4036	1-249-421-11	CARBON 2.2K 5% 1/4W F											(AEP, UK, EE)
							R222	1-249-397-11	CARBON 22 5% 1/4W F				
△ R4043	1-212-881-11	FUSIBLE 100 5% 1/4W F											(AEP, UK, EE)
R4051	1-249-417-11	CARBON 1K 5% 1/4W F											
R4052	1-249-437-11	CARBON 47K 5% 1/4W					R223	1-249-393-11	CARBON 10 5% 1/4W F				
R4053	1-249-413-11	CARBON 470 5% 1/4W F											(AEP, UK, EE)
R4054	1-249-437-11	CARBON 47K 5% 1/4W							< RELAY >				
							RY781	1-515-622-11	RELAY				
									< TERMINAL >				
R4056	1-249-425-11	CARBON 4.7K 5% 1/4W F					TB201	1-537-923-11	TERMINAL BOARD (6P) (REAR SPEAKER)				
R4057	1-249-425-11	CARBON 4.7K 5% 1/4W F					*****						
R4058	1-249-425-11	CARBON 4.7K 5% 1/4W F					*	A-4303-596-A	TCB BOARD, COMPLETE (EE, CIS)				
R4059	1-249-425-11	CARBON 4.7K 5% 1/4W F							*****				
R4060	1-249-397-11	CARBON 22 5% 1/4W F							< CAPACITOR >				
R4061	1-249-397-11	CARBON 22 5% 1/4W F					C1	1-163-141-00	CERAMIC CHIP 0.001uF 5% 50V				
R4063	1-249-417-11	CARBON 1K 5% 1/4W F					C2	1-126-967-11	ELECT 47uF 20% 16V				
R4064	1-249-431-11	CARBON 15K 5% 1/4W					C3	1-163-038-91	CERAMIC CHIP 0.1uF 25V				
R4065	1-249-441-11	CARBON 100K 5% 1/4W					C5	1-163-031-11	CERAMIC CHIP 0.01uF 50V				
△ R4070	1-220-755-11	METAL 0.22 10% 2W					C6	1-163-038-91	CERAMIC CHIP 0.1uF 25V				

*	1-669-963-11	SURR SPK BOARD											
		*****					C7	1-101-004-00	CERAMIC 0.01uF 50V				
		< CAPACITOR >					C8	1-163-031-11	CERAMIC CHIP 0.01uF 50V				
							C9	1-163-031-11	CERAMIC CHIP 0.01uF 50V				
C201	1-136-495-11	FILM 0.068uF 5% 50V					C10	1-162-306-11	CERAMIC CHIP 0.01uF 30% 16V				
		(AEP, UK, EE)					C16	1-163-038-91	CERAMIC CHIP 0.1uF 25V				
C202	1-104-666-11	ELECT 220uF 20% 25V											
C203	1-162-306-11	CERAMIC 0.01uF 20% 16V											
C221	1-136-495-11	FILM 0.068uF 5% 50V											
		(AEP, UK, EE)											

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
C19	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C21	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C22	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C23	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C24	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C26	1-126-967-11	ELECT	47uF	20%	16V
C28	1-126-967-11	ELECT	47uF	20%	16V
C29	1-162-306-11	CERAMIC	0.01uF	30%	16V
C30	1-126-961-11	ELECT	2.2uF	20%	50V
C31	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C32	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C33	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C34	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C35	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C36	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C37	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C39	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C40	1-126-967-11	ELECT	47uF	20%	16V
C41	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C42	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C43	1-163-031-91	CERAMIC CHIP	0.01uF		50V
C44	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C45	1-163-077-00	CERAMIC CHIP	0.1uF		50V
C46	1-126-967-11	ELECT	47uF	20%	16V
C47	1-126-301-11	ELECT	1.0uF	20%	50V
C48	1-163-059-00	CERAMIC CHIP	0.01uF		50V
C49	1-126-964-11	ELECT	10uF	20%	50V
C50	1-126-960-11	ELECT	1.0uF	20%	50V
C51	1-126-959-11	ELECT	0.47uF	20%	50V
C52	1-126-960-11	ELECT	1.0uF	20%	50V
C53	1-126-964-11	ELECT	10uF	20%	50V
C54	1-104-396-11	ELECT	10uF	20%	16V
C55	1-104-396-11	ELECT	10uF	20%	16V
C56	1-104-396-11	ELECT	10uF	20%	16V
C57	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C58	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C59	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C60	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C61	1-126-301-11	ELECT	1.0uF	20%	50V
C62	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C63	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C65	1-126-967-11	ELECT	47uF	20%	16V
C66	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C67	1-126-162-11	ELECT	3.3uF	20%	50V
C68	1-163-031-11	CERAMIC	0.01uF		50V
C69	1-126-967-11	ELECT	47uF	20%	16V
C71	1-162-306-11	CERAMIC	0.01uF	30%	16V
C72	1-126-967-11	ELECT	47uF	20%	16V
C73	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C74	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C1701	1-162-294-31	CERAMIC CHIP	0.001uF	10%	50V
C1702	1-130-014-00	FILM	470PF	5%	50V
C1703	1-126-959-11	ELECT	0.47uF	20%	50V
C1704	1-126-959-11	ELECT	0.47uF	20%	50V
C1705	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C1706	1-126-960-11	ELECT	1.0uF	20%	50V
C1707	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C1710	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C1711	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C1712	1-130-736-11	FILM	0.01uF	5%	50V

Ref. No.	Part No.	Description			Remarks
C1713	1-130-736-11	FILM	0.01uF	5%	50V
C1714	1-126-960-11	ELECT	1.0uF	20%	50V
C1715	1-126-960-11	ELECT	1.0uF	20%	50V
C1716	1-126-960-11	ELECT	1.0uF	20%	50V
C1719	1-126-967-11	ELECT	47uF	20%	16V
C1720	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C1723	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C1724	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C1725	1-126-967-11	ELECT	47uF	20%	16V
C1726	1-126-960-11	ELECT	1.0uF	20%	50V
C1727	1-126-960-11	ELECT	1.0uF	20%	50V
C1728	1-126-966-11	ELECT	33uF	20%	16V
< FILTER >					
CF1	1-567-389-11	FILTER, CERAMIC			
CF3	1-567-389-11	FILTER, CERAMIC			
< CONNECTOR >					
CN1	1-774-292-21	HOUSING, CONNECTOR (PC BOARD) 15P			
< TRIMMER >					
CT1701	1-141-444-11	CAP, CERAMIC TRIMMER 50PF			
< DIODE >					
D21	8-719-976-99	DIODE DTZ5.1B			
D41	8-719-016-74	DIODE 1SS352			
D42	8-719-016-74	DIODE 1SS352			
D43	8-719-016-74	DIODE 1SS352			
D1701	8-719-016-74	DIODE 1SS352			
D1702	8-719-016-74	DIODE 1SS352			
D1703	8-719-911-19	DIODE 1SS119-25			
D1704	8-719-016-74	DIODE 1SS352			
< FRONTEND >					
FE1	1-693-335-11	FRONT END (3 GANG)			
FE2	1-233-514-11	ENCAPSULATED COMPONENT			
< IC >					
IC21	8-759-288-54	IC LC72130			
IC41	8-759-495-82	IC LA1838			
IC1701	8-759-063-04	IC IR3R42			
IC1702	8-759-140-53	IC uPD4053BC			
< IFT >					
IFT41	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)			
< JUMPER RESISTOR >					
JR2	1-216-295-91	METAL CHIP	0	5%	1/10W
JR6	1-216-295-91	METAL CHIP	0	5%	1/10W
JR8	1-216-295-91	METAL CHIP	0	5%	1/10W
JR9	1-216-295-91	METAL CHIP	0	5%	1/10W
JR12	1-216-296-91	METAL CHIP	0	5%	1/8W
JR46	1-216-296-91	METAL CHIP	0	5%	1/8W
JR47	1-216-295-91	METAL CHIP	0	5%	1/10W
JR48	1-216-295-91	METAL CHIP	0	5%	1/10W
JR49	1-216-296-91	METAL CHIP	0	5%	1/8W
JR51	1-216-295-91	METAL CHIP	0	5%	1/10W

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
JR52	1-216-295-91	METAL CHIP	0 5% 1/10W	R31	1-216-025-91	METAL CHIP	100 5% 1/10W
JR53	1-216-296-91	METAL CHIP	0 5% 1/8W	R32	1-249-425-11	CARBON	4.7K 5% 1/4W F
JR54	1-216-295-91	METAL CHIP	0 5% 1/10W	R33	1-249-425-11	CARBON	4.7K 5% 1/4W F
JR1701	1-216-295-91	METAL CHIP	0 5% 1/10W	R34	1-216-065-91	METAL CHIP	4.7K 5% 1/10W
JR1702	1-216-295-91	METAL CHIP	0 5% 1/10W	R35	1-216-214-00	METAL CHIP	4.7K 5% 1/8W
JR1703	1-216-295-91	METAL CHIP	0 5% 1/10W	R36	1-216-025-91	METAL CHIP	100 5% 1/10W
JR1704	1-216-295-91	METAL CHIP	0 5% 1/10W	R37	1-216-073-00	METAL CHIP	10K 5% 1/10W
JR1705	1-216-295-91	METAL CHIP	0 5% 1/10W	R38	1-216-089-91	METAL CHIP	47K 5% 1/10W
< COIL >				R39	1-249-429-11	CARBON	10K 5% 1/4W
L3	1-410-521-11	MICRO INDUCTOR	100uH	R40	1-216-089-91	METAL CHIP	47K 5% 1/10W
L41	1-407-500-00	MICRO INDUCTOR	4.7mH	R41	1-216-013-00	METAL CHIP	33 5% 1/10W
L1701	1-409-497-11	COIL (FILTER)		R42	1-216-065-91	METAL CHIP	4.7K 5% 1/10W
< FILTER >				R43	1-216-037-00	METAL CHIP	330 5% 1/10W
LPF41	1-239-845-11	FILTER, LOW PASS		R44	1-216-001-00	METAL CHIP	10 5% 1/10W
LPF42	1-239-845-11	FILTER, LOW PASS		R45	1-247-843-11	CARBON	3.3K 5% 1/4W F
< TRANSISTOR >				R46	1-216-065-91	METAL CHIP	4.7K 5% 1/10W
Q1	8-729-201-27	TRANSISTOR 2SC2715-Y		R47	1-216-097-91	METAL CHIP	100K 5% 1/10W
Q2	8-729-201-27	TRANSISTOR 2SC2715-Y		R48	1-249-417-11	CARBON	1.0K 5% 1/4W F
Q3	8-729-201-27	TRANSISTOR 2SC2715-Y		R49	1-216-049-91	METAL CHIP	1.0K 5% 1/10W
Q4	8-729-201-27	TRANSISTOR 2SC2715-Y		R50	1-216-065-91	METAL CHIP	4.7K 5% 1/10W
Q5	8-729-424-08	TRANSISTOR UN2111		R51	1-216-065-91	METAL CHIP	4.7K 5% 1/10W
Q9	8-729-216-22	TRANSISTOR 2SA1162-G		R52	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
Q11	8-729-421-22	TRANSISTOR UN2211		R53	1-216-061-00	METAL CHIP	3.3K 5% 1/4W
Q12	8-729-421-22	TRANSISTOR UN2211		R54	1-216-073-00	METAL CHIP	10K 5% 1/10W
Q13	8-729-421-22	TRANSISTOR UN2211		R55	1-216-061-00	METAL CHIP	3.3K 5% 1/10W
Q14	8-729-421-22	TRANSISTOR UN2211		R57	1-216-162-00	METAL CHIP	33 5% 1/8W
Q1701	8-729-424-08	TRANSISTOR UN2111		R58	1-216-013-00	METAL CHIP	33 5% 1/10W
Q1702	8-729-027-43	TRANSISTOR RT1N141C-TP-1		R91	1-216-295-91	METAL CHIP	0 5% 1/10W
Q1703	8-729-421-22	TRANSISTOR UN2211		R92	1-216-073-00	METAL CHIP	10K 5% 1/10W
< RESISTOR >				R1701	1-216-079-00	METAL CHIP	18K 5% 1/10W
R1	1-249-401-11	CARBON	47 5% 1/4W F	R1702	1-216-085-00	METAL CHIP	33K 5% 1/10W
R2	1-216-037-00	METAL CHIP	330 5% 1/10W	R1703	1-216-069-00	METAL CHIP	6.8K 5% 1/10W
R3	1-216-037-00	METAL CHIP	330 5% 1/10W	R1704	1-216-076-00	METAL CHIP	13K 5% 1/10W
R5	1-216-037-00	METAL CHIP	330 5% 1/10W	R1705	1-216-049-91	METAL CHIP	1.0K 5% 1/10W
R6	1-216-081-00	METAL CHIP	22K 5% 1/10W	R1706	1-216-049-91	METAL CHIP	1.0K 5% 1/10W
R7	1-216-049-91	METAL CHIP	1K 5% 1/10W	R1707	1-216-097-91	METAL CHIP	100K 5% 1/10W
R8	1-216-037-00	METAL CHIP	330 5% 1/10W	R1708	1-216-095-00	METAL CHIP	82K 5% 1/10W
R9	1-216-081-00	METAL CHIP	22K 5% 1/10W	R1709	1-216-089-91	METAL CHIP	47K 5% 1/10W
R10	1-216-037-00	METAL CHIP	330 5% 1/10W	R1710	1-216-073-00	METAL CHIP	10K 5% 1/10W
R11	1-216-081-00	METAL CHIP	22K 5% 1/10W	R1711	1-249-429-11	CARBON	10K 5% 1/4W
R12	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R1714	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R13	1-216-037-00	METAL CHIP	330 5% 1/10W	R1715	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R14	1-216-081-00	METAL CHIP	22K 5% 1/10W	R1716	1-216-097-91	METAL CHIP	100K 5% 1/10W
R18	1-216-073-00	METAL CHIP	10K 5% 1/10W	R1717	1-216-097-91	METAL CHIP	100K 5% 1/10W
R19	1-216-073-00	METAL CHIP	10K 5% 1/10W	R1718	1-249-429-11	CARBON	10K 5% 1/4W
R21	1-249-417-11	CARBON	1.0K 5% 1/4W	R1719	1-216-097-91	METAL CHIP	100K 5% 1/10W
R22	1-249-417-11	CARBON	1.0K 5% 1/4W	R1720	1-249-434-11	CARBON	27K 5% 1/4W
R23	1-249-417-11	CARBON	1.0K 5% 1/4W	R1721	1-216-073-00	METAL CHIP	10K 5% 1/10W
R24	1-247-807-31	CARBON	100 5% 1/4W	< VARIABLE RESISTOR >			
R25	1-249-417-11	CARBON	1.0K 5% 1/4W F	RV41	1-238-600-11	RES, ADJ, CARBON 10K	
R26	1-249-437-11	CARBON	47K 5% 1/4W	RV42	1-238-600-11	RES, ADJ, CARBON 10K	
R27	1-249-429-11	CARBON	10K 5% 1/4W	RV1701	1-238-601-11	RES, ADJ, CARBON 22K	
R28	1-249-417-11	CARBON	1.0K 5% 1/4W F	RV1702	1-238-599-11	RES, ADJ, CARBON 4.7K	
R29	1-216-061-00	METAL CHIP	3.3K 5% 1/10W	< TERMINAL >			
R30	1-216-186-00	METAL CHIP	330 5% 1/8W	TM1	1-537-488-11	TERMINAL BOARD (ANT) (ANTENNA)	

Ref. No.	Part No.	Description	Remarks
< TEST PIN >			
TP1701	1-536-354-00	PIN, POST	
TP1702	1-536-354-00	PIN, POST	
< VIBRATOR >			
X21	1-760-549-31	VIBRATOR, CRYSTAL (4.5MHz)	
X21	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)	
X41	1-767-825-21	FILTER, CERAMIC (10.7MHz)	
X42	1-527-981-00	FILTER, CERAMIC (450kHz)	

*	A-4303-597-A	TCB BOARD, COMPLETE (AEP, UK)	

< CAPACITOR >			
C1	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C2	1-126-967-11	ELECT 47uF	20% 16V
C3	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C5	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C6	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C8	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C9	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C10	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C16	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C19	1-163-249-11	CERAMIC CHIP 82PF	5% 50V
C21	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C22	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C23	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C24	1-163-239-11	CERAMIC CHIP 33PF	5% 50V
C26	1-126-967-11	ELECT 47uF	20% 16V
C28	1-126-967-11	ELECT 47uF	20% 16V
C29	1-162-306-11	CERAMIC 0.01uF	30% 16V
C30	1-126-961-11	ELECT 2.2uF	20% 50V
C31	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C32	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C33	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C34	1-163-229-11	CERAMIC CHIP 12PF	5% 50V
C35	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C36	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C37	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C39	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C40	1-126-967-11	ELECT 47uF	20% 16V
C41	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C42	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C43	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C44	1-163-038-91	CERAMIC CHIP 0.1uF	25V
C45	1-163-077-00	CERAMIC CHIP 0.1uF	50V
C46	1-126-967-11	ELECT 47uF	20% 16V
C47	1-126-301-11	ELECT 1.0uF	20% 50V
C48	1-163-059-00	CERAMIC CHIP 0.01uF	50V
C49	1-126-964-11	ELECT 10uF	20% 50V
C50	1-126-960-11	ELECT 1.0uF	20% 50V
C51	1-126-959-11	ELECT 0.47uF	20% 50V
C52	1-126-960-11	ELECT 1.0uF	20% 50V
C53	1-126-964-11	ELECT 10uF	20% 50V
C54	1-104-396-11	ELECT 10uF	20% 16V
C55	1-104-396-11	ELECT 10uF	20% 16V
C56	1-104-396-11	ELECT 10uF	20% 16V
C57	1-163-017-00	CERAMIC CHIP 0.0047uF	10% 50V
C58	1-163-017-00	CERAMIC CHIP 0.0047uF	10% 50V

Ref. No.	Part No.	Description	Remarks
C59	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C60	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V
C61	1-126-301-11	ELECT 1uF	20% 50V
C62	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C63	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C65	1-126-967-11	ELECT 47uF	20% 16V
C66	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C67	1-126-162-11	ELECT 3.3uF	20% 50V
C68	1-163-031-11	CERAMIC 0.01uF	50V
C69	1-126-967-11	ELECT 47uF	20% 16V
C71	1-162-306-11	CERAMIC 0.01uF	30% 16V
C72	1-126-967-11	ELECT 47uF	20% 16V
C73	1-163-031-11	CERAMIC 0.01uF	50V
C74	1-163-031-11	CERAMIC 0.01uF	50V
C120	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C1751	1-164-159-11	CERAMIC 0.1uF	50V
C1752	1-126-967-11	ELECT 47uF	20% 16V
C1753	1-126-964-11	ELECT 10uF	20% 50V
C1754	1-162-291-31	CERAMIC 560PF	10% 50V
C1755	1-126-964-11	ELECT 10uF	20% 50V
C1756	1-126-961-11	ELECT 2.2uF	20% 50V
C1757	1-162-288-31	CERAMIC 330PF	10% 50V
C1758	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C1759	1-163-135-00	CERAMIC CHIP 560PF	5% 50V
C1760	1-163-031-11	CERAMIC CHIP 0.01uF	50V
C1761	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C1762	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C1763	1-126-961-11	ELECT 2.2uF	20% 50V
< FILTER >			
CF1	1-567-389-11	FILTER, CERAMIC	
CF2	1-760-393-11	FILTER, CERAMIC	
CF3	1-760-393-11	FILTER, CERAMIC	
< CONNECTOR >			
CN1	1-774-292-21	HOUSING, CONNECTOR (PC BOARD) 15P	
< DIODE >			
D21	8-719-976-99	DIODE DTZ5.1B	
D41	8-719-016-74	DIODE 1SS352	
D42	8-719-911-19	DIODE 1SS119-25	
D1751	8-719-016-74	DIODE 1SS352	
< FRONT-END >			
FE1	1-693-357-11	FRONT END (4 GANG)	
FE2	1-233-514-11	ENCAPSULATED COMPONENT	
< IC >			
IC21	8-759-288-54	IC LC72130	
IC41	8-759-495-82	IC LA1838	
IC1751	8-759-634-51	IC M5218AP	
IC1752	8-759-450-86	IC BU1922	
< IFT >			
IFT41	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< JUMPER RESISTOR >				R26	1-249-437-11	CARBON 47K 5%	1/4W
JR2	1-216-295-91	METAL CHIP 0 5%	1/10W	R27	1-249-429-11	CARBON 10K 5%	1/4W
JR6	1-216-295-91	METAL CHIP 0 5%	1/10W	R28	1-249-417-11	CARBON 1K 5%	1/4W F
JR8	1-216-295-91	METAL CHIP 0 5%	1/10W	R29	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
JR9	1-216-295-91	METAL CHIP 0 5%	1/10W	R30	1-216-186-00	METAL CHIP 330 5%	1/8W
JR12	1-216-296-91	METAL CHIP 0 5%	1/8W	R31	1-216-025-91	METAL CHIP 100 5%	1/10W
JR46	1-216-296-91	METAL CHIP 0 5%	1/8W	R32	1-249-425-11	CARBON 4.7K 5%	1/4W F
JR47	1-216-295-11	METAL CHIP 0 5%	1/10W	R33	1-249-425-11	CARBON 4.7K 5%	1/4W F
JR48	1-216-295-11	METAL CHIP 0 5%	1/10W	R34	1-216-065-91	METAL CHIP 4.7K 5%	1/10W
JR49	1-216-296-11	METAL CHIP 0 5%	1/8W	R35	1-216-214-00	METAL CHIP 4.7K 5%	1/8W
JR51	1-216-295-11	METAL CHIP 0 5%	1/10W	R36	1-216-025-91	METAL CHIP 100 5%	1/10W
JR52	1-216-295-11	METAL CHIP 0 5%	1/10W	R37	1-216-073-00	METAL CHIP 10K 5%	1/10W
JR53	1-216-296-11	METAL CHIP 0 5%	1/8W	R38	1-216-089-91	METAL CHIP 47K 5%	1/10W
JR54	1-216-295-11	METAL CHIP 0 5%	1/10W	R39	1-249-429-11	CARBON 10K 5%	1/4W
< COIL >				R40	1-216-089-91	METAL CHIP 47K 5%	1/10W
L2	1-414-142-11	MICRO INDUCTOR 1uH		R41	1-216-013-00	METAL CHIP 33 5%	1/10W
L3	1-410-521-11	MICRO INDUCTOR 100uH		R42	1-216-065-91	METAL CHIP 4.7K 5%	1/10W
L4	1-410-515-11	INDUCTOR 33uH		R43	1-216-037-00	METAL CHIP 330 5%	1/10W
L41	1-407-500-00	MICRO INDUCTOR 4.7mH		R44	1-216-001-00	METAL CHIP 10 5%	1/10W
L1751	1-410-521-11	MICRO INDUCTOR 100uH		R45	1-247-843-11	CARBON 3.3K 5%	1/4W F
< FILTER >				R46	1-216-065-91	METAL CHIP 4.7K 5%	1/10W
LPF41	1-239-845-11	FILTER, LOW PASS		R47	1-216-097-91	METAL CHIP 100K 5%	1/10W
LPF42	1-239-845-11	FILTER, LOW PASS		R48	1-249-417-11	CARBON 1K 5%	1/4W F
< TRANSISTOR >				R49	1-216-049-91	METAL CHIP 1.0K 5%	1/10W
Q1	8-729-201-27	TRANSISTOR 2SC2715-Y		R50	1-216-065-91	METAL CHIP 4.7K 5%	1/10W
Q2	8-729-201-27	TRANSISTOR 2SC2715-Y		R51	1-216-065-91	METAL CHIP 4.7K 5%	1/10W
Q3	8-729-201-27	TRANSISTOR 2SC2715-Y		R52	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
Q4	8-729-201-27	TRANSISTOR 2SC2715-Y		R53	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
Q5	8-729-424-08	TRANSISTOR UN2111		R54	1-216-073-00	METAL CHIP 10K 5%	1/10W
Q9	8-729-216-22	TRANSISTOR 2SA1162-G		R55	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
Q11	8-729-421-22	TRANSISTOR UN2211		R57	1-216-162-00	METAL CHIP 33 5%	1/8W
Q12	8-729-421-22	TRANSISTOR UN2211		R58	1-216-013-00	METAL CHIP 33 5%	1/10W
Q13	8-729-421-22	TRANSISTOR UN2211		R91	1-216-295-91	METAL CHIP 0 5%	1/10W
Q14	8-729-421-22	TRANSISTOR UN2211		R92	1-216-073-00	METAL CHIP 10K 5%	1/10W
< RESISTOR >				R1751	1-247-807-31	CARBON 100 5%	1/4W
R1	1-249-401-11	CARBON 47 5%	1/4W F	R1752	1-216-073-00	METAL CHIP 10K 5%	1/10W
R2	1-216-037-00	METAL CHIP 330 5%	1/10W	R1753	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R3	1-216-037-00	METAL CHIP 330 5%	1/10W	R1754	1-216-097-91	METAL CHIP 100K 5%	1/10W
R5	1-216-037-00	METAL CHIP 330 5%	1/10W	R1755	1-216-097-91	METAL CHIP 100K 5%	1/10W
R6	1-216-081-00	METAL CHIP 22K 5%	1/10W	R1756	1-249-401-11	CARBON 47 5%	1/4W F
R7	1-216-037-00	METAL CHIP 330 5%	1/10W	R1757	1-216-295-91	METAL CHIP 0 5%	1/10W
R8	1-216-037-00	METAL CHIP 330 5%	1/10W	< VARIABLE RESISTOR >			
R9	1-216-081-00	METAL CHIP 22K 5%	1/10W	RV41	1-238-600-11	RES, ADJ, CARBON 10K	
R10	1-216-037-00	METAL CHIP 330 5%	1/10W	RV42	1-238-600-11	RES, ADJ, CARBON 10K	
R11	1-216-081-00	METAL CHIP 22K 5%	1/10W	< TERMINAL >			
R12	1-216-037-00	METAL CHIP 330 5%	1/10W	TM1	1-537-488-11	TERMINAL BOARD (ANT) (ANTENNA)	
R13	1-216-037-00	METAL CHIP 330 5%	1/10W	< VIBRATOR >			
R14	1-216-081-00	METAL CHIP 22K 5%	1/10W	X21	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)	
R18	1-216-073-00	METAL CHIP 10K 5%	1/10W	X41	1-767-825-21	FILTER, CERAMIC (10.7MHz)	
R19	1-216-073-00	METAL CHIP 10K 5%	1/10W	X42	1-527-981-00	FILTER, CERAMIC (450KHz)	
R21	1-216-049-91	METAL CHIP 1.0K 5%	1/10W	X1751	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)	
R22	1-216-049-91	METAL CHIP 1.0K 5%	1/10W	*****			
R23	1-216-049-91	METAL CHIP 1.0K 5%	1/10W				
R24	1-216-025-91	METAL CHIP 100 5%	1/10W				
R25	1-249-417-11	CARBON 1K 5%	1/4W F				

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	

3	1-773-125-11	WIRE (FLAT TYPE) (19 CORE)	
153	1-233-545-31	ENCAPSULATED COMPONENT (TCB) (TH, AUS)	
153	1-233-546-31	ENCAPSULATED COMPONENT (TCB)	(EA, SP, MY)
△ 160	1-575-653-11	CORD, POWER (TH)	
△ 160	1-696-847-11	CORD, POWER (AUS)	
△ 160	1-751-520-11	CORD, POWER (UK)	
△ 160	1-777-071-21	CORD, POWER (AEP, EE, EA, CIS, SP, MY)	
△ 161	1-569-008-21	ADAPTOR, CONVERSION 2P (EA, SP, MY)	
M901	1-763-117-11	FAN, DC	
△ T901	1-431-900-11	TRANSFORMER, POWER (AEP, UK, EE, CIS)	
△ T901	1-431-901-11	TRANSFORMER, POWER (EA, SP, MY, TH, AUS)	

HARDWARE LIST

#1	7-685-647-79	SCREW +BVTP 3 × 10 TYPE2 N-S
#2	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S
#3	7-621-775-20	SCREW +B 2.6 × 5
#4	7-685-650-79	SCREW +BVTP 3 × 16 TYPE2 IT-3
#5	7-685-881-09	SCREW +BVTT 4 × 8 (S)
#6	7-685-872-09	SCREW +BVTT 3 × 8 (S)
#7	7-685-546-19	SCREW +BTP 3 × 8 TYPE2 N-S

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.